

# *Journal of Mycology*

## TABLE OF CONTENTS

SHEAR — <i>Peridermium cerebrum</i> Peck and <i>Cronartium Quercuum</i> (Berk).....	89
MORGAN — North American Species of <i>Heliomyces</i> ....	92
RICKER — Second Supplement to New Genera — (Concluded) .....	95
KELLERMAN — Index to North American Mycology.....	112
KELLERMAN — Notes from Mycological Literature, XIX .....	128
EDITOR'S NOTES.....	136

**W. A. KELLERMAN, PH. D.**

*Professor of Botany, Ohio State University, Columbus, Ohio*

*Entered as Second Class Matter, Post-office at Columbus, Ohio.*

PRESS OF F. J. HEER, COLUMBUS, OHIO.

## Cost of Separates.

---

Contributors who desire separates of their articles will receive the same at cost, approximately as follows:

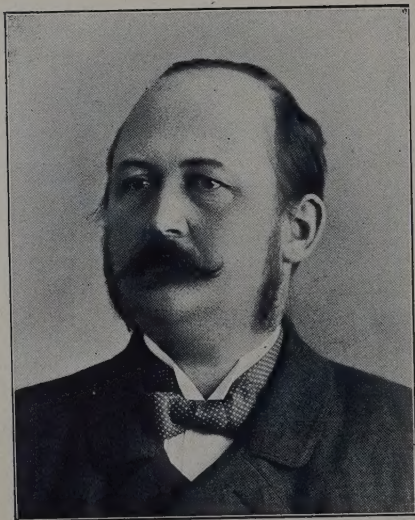
For 4 pages or less:	100 copies	\$1 75	200 copies	\$2 25
" 8 " "	100 "	2 50	200 "	3 25
" 16 " "	100 "	4 25	450 "	5 50

For more extended articles proportionately higher.

Plates not included in the above.

**ADDRESS: EDITOR JOURNAL OF MYCOLOGY**





Dr L. Hollis

Journal of Mycology Portraits with Facsimile Autographs.



# Journal of Mycology

VOLUME 12—MAY 1906

---

## TABLE OF CONTENTS

SHEAR— <i>Peridermium cerebrum</i> Peck and <i>Cronartium Quercuum</i> (Berk.).....	89
MORGAN—North American Species of <i>Heliomyces</i> .....	92
RICKER—Second Supplement to New Genera—(Concluded).....	95
KELLERMAN—Index to North American Mycology.....	112
KELLERMAN—Notes from Mycological Literature, XIX.....	128
EDITOR'S NOTES.....	136

---

## PERIDERMIIUM CEREBRUM PECK AND CRONARTIUM QUERCUUM (BERK.)\*

C. L. SHEAR.

The recent work of Klebahn,<sup>1</sup> Ed. Fischer,<sup>3</sup> and Shirai<sup>2</sup> on certain species of *Peridermium* and their relation to *Cronartium* naturally suggests the probable connection of our American species. The common occurrence of *P. cerebrum* on trunks and branches of *Pinus Virginiana* about Washington and also the abundance of *Cronartium Quercuum* (Berk.) on oaks in the same vicinity led to the suspicion that a connection existed between these two forms.

With a view of obtaining some more definite light on the subject, some outdoor inoculations were made in the spring of 1902 by applying the aecidiospores of *Peridermium cerebrum* to the leaves of *Quercus Prinus*, *Q. alba* and *Q. coccinea*. The inoculations were made just about sundown on the evening of May 1, twelve marked leaves being used in each case. No infection took place in the case of *Q. Prinus* and *Q. alba*, which are usually entirely free from the fungus in this vicinity.

On May 12 uredo sori were found on the under surface of the infected leaves of *Q. coccinea*, as follows:

---

\*Read before the American Mycological Society. New Orleans, Jan. 1, 1906.

<sup>1</sup> Deutsch Bot. Gesell. 8, 1890, 61, and later papers.

<sup>2</sup> Beiträge Krypt. Schweiz. 1, 1898, 90, and elsewhere.

<sup>3</sup> Bot. Mag. 13, 1899, 74.

No. 1.....	20
No. 2.....	17
No. 3.....	72
No. 4.....	62
No. 5.....	3
No. 6.....	3
No. 7.....	2
No. 8.....	11
No. 9.....	116
No. 10.....	20
No. 11.....	28
No. 12.....	0

On May 18 the cylindrical brown masses of teleutospores were found arising from many of the uredo sori. The surrounding uninoculated leaves on the same tree showed at this time an occasional uredo sorus, varying from one to three on a few of the leaves, but no signs of teleutospores were yet to be found. This seemed to indicate that infection had taken place later in the case of the natural inoculations than in the case of the artificial ones.

This experiment, conducted in the open woods where there was possibility or perhaps probability of infection from other sources is, of course, not conclusive. The large number of sori occurring on most of the artificially inoculated leaves as compared with the very small number found on the surrounding ones, taken in connection with their much earlier appearance, seems however to indicate a genetic relation between these forms.

Other attempts to produce artificial infection undertaken during the middle of the day failed, but later experiments made in the evening were apparently successful, as numerous sori of the *Cronartium* developed on the inoculated leaves and few or none on those uninoculated. Unfortunately, we have not thus far had opportunity to carry out artificial inoculation experiments under conditions which would preclude the possibility of infection from any other source.

As bearing upon the probability of the genetic relation of these two forms, additional evidence is furnished by the following observations: On May 17, 1903, a small tree of *Pinus Virginiana*, about five feet high, was found having a large spore-bearing excrescence of *Peridermium cerebrum* on its trunk about one foot from the ground. About two feet away two seedling oaks were growing, one *Quercus Marylandica* and the other *Q. Prinus*, bearing about a dozen leaves each. Most of the leaves on both of these plants had their under surfaces almost literally covered with the uredo sori of *Cronartium Quercuum*, and many showed teleutospores forming. We have been unable to find any record of the fungus occurring on *Q. Prinus* and have never found it ourselves except in this instance, in spite of diligent search in various localities where the *Peridermium* is found, but not in such

close proximity to the oak, and we have never seen it on any host in such great abundance as it was on these two plants. The sori were not quite so numerous and well developed on the *Q. Prinus* as on *Q. Marylandica*, which is a normal and common host of the fungus.

Shirai <sup>4</sup> has, according to Klebahn <sup>5</sup>, proven by successful inoculation of seedling oaks (*Quercus serrata*, *Q. variabilis* and *Q. glandulifera*) the connection between *Cronartium gigantum* (Mayr) Tubeuf and what he calls *Cronartium Quercuum* (Cooke) Miyabe. Whether this *Cronartium*, which occurs on the oaks in Japan, is identical with the plant occurring on our oaks we are unable to say, not having had an opportunity to examine Japanese specimens. The authority given by Tubeuf for *Cronartium Quercuum* is also (Cooke) Miyabe.

The American plant was first described, so far as we can learn, by Berkeley <sup>6</sup> in 1874 as *Cronartium Asclepiadeum Quercuum*, collected on *Quercus nigra* in South Carolina and on *Q. velutina* in Pennsylvania. We find no description of the plant by Cooke.

In regard to *Peridermium gigantum* (Mayr) Tubeuf, this was first described or mentioned at least by H. Mayr as *Aecidium gigantum* and transferred to *Peridermium* by Tubeuf<sup>7</sup>. It is reported as occurring on *Pinus desiora*, *P. Thunbergi*, *P. parviflora* and *P. Linckuensis* in Japan. We had an opportunity during the past summer, through the kindness of Prof. Tubeuf, to examine the Japanese specimens of this fungus upon which his figures of the plant are based and which are preserved in the collection of the Forestry Institute at Munich. The specimens are identical in appearance with those collected on *Pinus Virginiana* in the vicinity of Washington. Moreover, the sweet sap containing spermatia, which is said to exude from the surface of the swellings produced by the fungus in Japan, is equally characteristic of our plant. We are, therefore, of the opinion that *Peridermium gigantum* (Mayr) Tubeuf is the same as *P. cerebrum* Peck, which was described many years before the Japanese plant. Though the matter can not be regarded as settled, all the evidence at hand at present points to the identity of these plants and their genetic connection with the uredo and teleutospore stages which occur on various species of oak and which are known as *Cronartium Quercuum*.

It may be interesting to add a list of species of pine and oak upon which the two forms have been found in this country.

<sup>4</sup> l. c.

<sup>5</sup> Die Wirtswechselnden Rostpilze, 1904, p. 381.

<sup>6</sup> Greville, 1874, 3, 59.

<sup>7</sup> Pflanzenkrankheiten durch Kryptogame Parasiten verursacht, 1895, p. 429.



*Peridermium cerebrum.*

The original specimens from New York were on *Pinus rigida*. It has also been collected on this host in New Jersey by Ellis (N. A. F. No. 1022) and by the writer. It is reported in Farlow and Seymour's "Host Index" as occurring on *P. ponderosa*. In Mohr's "Plant Life of Alabama" it is reported on *P. taeda*, *P. echinata* and *P. Virginiana*. There are specimens of a *Peridermium* from Mississippi and Texas in the pathological collection of the Bureau of Plant Industry, Department of Agriculture, which also appear to belong to this species. Its distribution, according to the records and specimens at hand, is from New York to Texas.

*Cronartium Quercuum.*

This is given by Farlow and Seymour as occurring on the following oaks: *Quercus coccinea*, *Q. nigra*, *Q. tinctoria* - *Q. velutina*, and *Q. virens* - *Q. virginiana*. There are specimens in the pathological collections of the Department of Agriculture on *Q. velutina*, *Q. Virginiana*, *Q. coccinea* and *Q. macrocarpa* (Fun. Col. No. 198). We have found it about Washington on *Quercus velutina*, *Q. coccinea*, *Q. Marylandica*, *Q. Phellos* and *Q. Prinus*. We have collected it in New Jersey on all the species last mentioned, except *Q. Prinus*, and also on the following additional species not before reported: *Q. alba*, *Q. digitata*, *Q. nana* and *Q. minor*. Its distribution, so far as indicated by the specimens seen, is from Pennsylvania and New Jersey to Mississippi and Texas. There are also specimens from Minnesota. Of course, if the connection between these two forms is correct, their distribution should be practically identical.

## NORTH AMERICAN SPECIES OF HELIOMYCES.

A. P. MORGAN.

HELIOMYCES LE'VILLE CHAMP. EXOT. AM. SC. NAT. 1844.

*Pileus coriaceous - or membranaceous - tremellose, plicate-sulcate or rugulose. Stipe central, tough, cylindric, fistulose, Lamellae similar in substance to the pileus, the edge acute; spores white.*

Small Agarics which are tremelloid when fresh and growing, and when dry have the appearance of *Marasmii*. Only about a dozen species have been described and these are very imperfectly known; the spores are recorded in but one or two species. The genus is certainly a very interesting one and worthy of the attention of students; but the species must be observed and described in their fresh and growing state, since they change their appear-



ance remarkably in drying. No doubt some tropical species of *Mycena* and *Marasmius* described from the dried specimens belong properly in *Heliomyces*.

#### A. STIPE GLABROUS.

##### a. *Pileus colored from the first.*

1. *HELIOMYCES BERTOROI* LE'VILLE CHAMP. EXOT. 1844.

Pileus discoid, umbilicate, naked, radiate-sulcate, ferruginous. Stipe slender, somewhat woody, naked, cylindric, ferruginous-purpurascens.

Growing upon the bark of trees in Porto Rico. The plant is 4 cm. in height.

2. *HELIOMYCES FOETENS* PATOUILLARD, JOURN. BOT. 1889.

Ill-smelling; fascicular. Pileus thin, membranaceous, glabrous, rufous, the center umbonate, the margin pellucid and torn. Stipe slender, rigid, glabrous, the apex thickened, slightly striate. Lamellae numerous, very thin, equal, adnexed; spores ovoid, hyaline,  $6 \times 4$  mic.

Growing on rotten wood of *Prunus occidentalis* upon the island of Martinique. Pileus 1.5-3 cm. in diameter, the stipe 6-8 cm. long and 1-2 mm. thick.

##### b. *Pileus at first white.*

3. *HELIOMYCES PLUMIERII* LE'VILLE CHAMP. EXOT. 1844. "Fungus crenatus tenuissimus niveus." Plumier, *Traite des Fougères*, 1705.

Pileus expanded, thin, striate, white, the margin crenate-dentate. Stipe cylindric, bulbillose at the base. Lamellae thin, serrulate.

Growing in the West Indies. Pileus 4-5 cm. in diameter, the stipe 9-10 cm. long and 4-5 mm. thick. A doubtful species.

4. *HELIOMYCES DECOLORANS* B. & C. ANN. & MAG. N. H. 1859.

Pileus glabrous, rugose, sulcate, white. Stipe rigid, shining white. Lamellae broad, decurrent, white, the interstices wrinkled.

Growing on dead wood, Alabama. Pileus 2-3 cm. in diameter, the stipe 5 cm. in height. The whole plant is at first white, in drying it changes color to rufous or tanny-brown.

#### B. STIPE PRUINOSE.

5. *HELIOMYCES NIGRIPES* MORGAN. *Agaricus nigripes* Schweinitz, Syn. Car. 1822. *Marasmius nigripes* Fries, *Épicrisis*, 1838.

Tremelloid. Pileus very thin, pure white, pruinose, rugulose-

sulcate, convex then expanded. Stipe thickest at the apex, tapering downward, black, white-pruinose, the base insititious. Lamellae pure white, unequal, some of them forked, adnate, the interstices venulose; spores hyaline, stellate, 3-5-rayed, the expanse of the rays 8-9 mic.

Growing on old leaves, sticks, etc. Pileus 1-2 cm. in diameter, the stipe 2-3.5 cm. long and 1-2 mm. thick. In the dry state, the lamellae are changed to flesh-color or rufous and red-brown, the stipe loses its black color and pileus and stipe become uniformly alutaceous. The pruinosity on the stipe and pileus consists of imperfect flocci and minute glittering cells.

6. *HELIOMYCES VIALIS* MORGAN. *Marasmius vialis* Peck. 51 N. Y. Rep. 1897.

Pileus membranaceous, convex, pruinous, white. Stipe short, tough, solid, at first white, then brown or blackish, but covered with a white pruinosity, commonly swollen at the base into a small downy bulb. Lamellae arcuate, distant, decurrent, white.

Growing on damp ground by the roadside. Pileus 4-10 mm. in diameter, the stipe 1-2 cm. long and about 1 mm. thick. This fungus has almost the same style of coloration as *Marasmius nigripes*.

#### INDEX TO THE SPECIES OF *MARASMIUS* AND *HELIOMYCES*.

- |                         |                         |                         |
|-------------------------|-------------------------|-------------------------|
| acerinus, 11:203        | chrysochaetes, 12:1     | fulviceps, 11:243       |
| aciculiformis, 11:245   | clavaeformis, 12:6      | fusco-purpureus, 11:206 |
| aculeatus, 12:6         | cohaerens, 11:238       | glabellus, 11:242       |
| albiceps, 12:5          | coilobasis, 11:210      | glaucopus, 11:235       |
| albo-fuscus, 12:5       | concinus, 11:212        | glebigenus, 11:242      |
| albo-marginatus, 11:244 | concolor, 12:7          | graminum, 12:1          |
| alliaceus, 11:239       | copelandi, 11:202       | gregarius, 11:236       |
| androsaceus, 11:245     | coracicolor, 11:233     | haematocephalus, 11:241 |
| anomalus, 11:208        | coracipes, 12:7         | hawaiensis, 12:8        |
| arachnoideus, 12:8      | corrugatus, 11:210      | helvolus, 11:245        |
| archyropus, 11:208      | cubensis, 11:237        | hinnuleus, 11:243       |
| asperifolius, 12:8      | cucullatus, 11:210      | hirtipes, 11:240        |
| atro-rubens, 12:2       | cucurbitula, 11:238     | hyperellus, 12:4        |
| atro-viridis, 11:233    | curreyi, 12:1           | hypophaeus, 11:243      |
| badiceps, 11:234        | curtisii, 12:7          | inaequallus, 11:244     |
| badius, 11:209          | cyathiformis, 12:4      | insititious, 12:2       |
| bambusinus, 11:245      | dealbatus, 11:237       | juglandis, 11:236       |
| bellipes, 11:207        | decolorans (Hel.) 12:93 | lachnophyllus, 11:239   |
| bermudensis, 11:237     | decurrens, 12:6         | lanatus, 11:204         |
| bertoroi (Hel.) 12:93   | delectans, 11:206       | languidus, 12:4         |
| biformis, 11:204        | dichrous, 11:211        | leptopus, 11:234        |
| bombycirrhiza, 11:207   | epiphyllus, 12:3        | leucocephalus, 12:5     |
| brevipes, 11:240        | erythropus, 11:207      | longipes, 11:240        |
| caespitosus, 12:7       | fagineus, 11:204        | macrorrhiza, 11:239     |
| calosporus, 12:8        | felix, 12:2             | melanopus, 11:245       |
| calopus, 11:235         | ferrugineus, 11:241     | merulinus, 12:8         |
| campanulatus, 11:242    | fibrosipes, 11:205      | minutissimus, 12:3      |
| candidus, 11:212        | filipes, 11:247         | minutus, 11:246         |
| capillaris, 11:247      | floriceps, 11:234       | multiceps, 11:240       |
| catervatus, 11:211      | foetens (Hel.) 12:93    | nidulus, 12:8           |

## INDEX — Concluded.

- nigripes (Hel.) 12:93  
 nuptialis, 11:238  
 obliquus, 12:7  
 olneyi, 11:235  
 opacus, 11:237  
 oreades, 11:205  
 papillatus, 11:240  
 papillosus, 11:209  
 peronatus, 11:204  
 perforans, 12:3  
 personatus, 11:209  
 petiolorum, 11:237  
 phaeus, 11:243  
 pirinus, 11:246  
 plancus, 11:205  
 plicatulus, 11:207  
 plumierii (Hel.) 12:93  
 poecilus, 11:244  
 polyphyllus, 11:208  
 praeacutus, 11:212  
 prasiosmus, 11:206  
 proletarius, 11:246  
 pruinatus, 11:242  
 pulchripes, 11:242  
 purpurascens, 12:4  
 purpureus, 12:6  
 pusio, 11:235  
 putredinis, 11:234  
 pyrrocephalus, 11:239  
 ramealis, 11:211  
 ramulinus, 11:236  
 rhodocephalus, 11:245  
 rhyssophyllus, 11:210  
 rigidus, 11:203  
 rotalis, 11:247  
 rotula, 11:247  
 rugulosus, 11:211  
 sabali, 12:8  
 saccharinus, 12:2  
 salignus, 11:236  
 sanguineus, 11:243  
 sarmentosus, 11:241  
 scabellus, 11:202  
 scorodonius, 11:234  
 semihirtipes, 11:206  
 semisparsus, 12:5  
 semisquarrosus, 11:206  
 semiustis, 12:7  
 sericipes, 11:211  
 siccus, 11:241  
 similis, 11:246  
 spinulifer, 11:238  
 spongiosus, 11:203  
 subcoracinus, 11:235  
 subglobosus, 11:210  
 subpilosus, 11:209  
 subtomentosus, 11:208  
 subnidus, 11:202  
 subvenosus, 11:246  
 sullivantii, 11:208  
 sulphureus, 11:204  
 straminipes, 11:247  
 striatipes, 11:205  
 stylobates, 11:210  
 tenebrarum, 11:234  
 tener, 11:243  
 tenerrimus, 11:236  
 thujinus, 12:2  
 tomentellus, 11:241  
 tomentosipes, 12:5  
 tortipes, 11:244  
 umbonatus, 11:203  
 urens, 11:202  
 vaillantii, 12:3  
 velutipes, 11:209  
 vialis (Hel.) 12:94  
 viridi-fuscus, 12:4  
 viticola, 11:203

SECOND SUPPLEMENT TO NEW GENERA OF FUNGI  
 PUBLISHED SINCE 1900 WITH CITATION  
 AND ORIGINAL DESCRIPTION.

COMPILED BY P. L. RICKER.

(Concluded from Page 75.)

V. LABOULBENIINEAE.

[Laboulbeniinae.]

DISTICHOMYCES Thaxter n. g. Laboulbeniaceae. Proceedings of the American Academy of Arts and Sciences, 41:308. 1905.

"Receptacle consisting of a basal and subbasal cell surmounted by two parallel series of cells of indefinite number, any of which may bear either a sterile appendage or an antheridium externally, one of the series ending in a perithecium, the other terminated by the primary appendage. Appendages of the same type as those of Rickia and Peyritschiella. Antheridia at maturity terminal on a unicellular branch, becoming quite free in a complete group."

VI. AECIDIOMYCETAE.

[Aecidiomycetae.]

BAEODROMUS Arthur n. g. Uredinaceae. Annales Mycologici, 3:19. 1905.



"Spermagonia globose, subepidermal. Telutospores catenulate, united laterally into compact definite sori; promycelium single from near apex of cell, external, recurved, bearing four globose sporidia."

[Aecidiomycetae.]

CALLIOSPORA Arthur n. g. Uredinales. Botanical Gazette, 39:390. 1905.

"Telutosori arising from beneath the epidermis, soon naked; telutospores 2-celled by transverse partition, wall colored, with an external layer which swells in water, germ pores 2 in each cell, lateral. Aecidium and uredo wanting. Spermogonia arising from beneath the cuticle, conical."

[Aecidiomycetae.]

PHRAGMIDIELLA P. Henn. n. g. Uredinales. Engler's Botanische Jahrbücher, 38:104. 1905.

"Uredosori haud paraphysati, uredosporae castaneo-obscurae, asperatae. Telutosporae 3-4 septatae constrictae, pallidulae."

[Aecidiomycetae.]

UROMYCLADIUM McAlpine n. g. Uredineae. Annales Mycologici, 3:321. 1905.

"O. Spermogonia somewhat hemispherical, produced under the cuticle, without paraphyses at mouth, preceding the formation of any other spore.

I. Aecidia at present unknown.

II. Uredospores borne singly and generally much larger than telutospores, with several distinct germ-pores and without paraphyses.

III. Telutospores in clusters, composed of one spore and cyst, or two or three spores with or without a cyst, depressed globose. Germination as in Uromyces and without a period of rest, as far as known."

## VII. BASIDIOMYCETAE.

[Basidiomycetae]

AMAURODERMA Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:360. 1905.

"Hymenophore large, epixylous, stipitate, the stipe often much elongated; surface smooth, encrusted, not varnished; context brown, punky; tubes cylindrical, concolorous, the mouths usually light-colored at first; spores ovoid or globose, brown."

[Basidiomycetae.]

AURANTIPORELLUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:486. 1905.

"Hymenophore large, annual, epixylous, effused, immarginate or narrowly reflexed; surface azonate, soft anoderm and orange-colored when young, becoming slightly encrusted and darker with age; context orange-colored, extremely soft and

spongy throughout; tubes orange-colored, very large, thin-walled, irregular, lacerate, fragile; spores smooth, hyaline."

[Basidiomycetae.]

AURANTIPORUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:487. 1905.

"Hymenophore large, annual, epixylous, sessile, dimidiate; surface anoderm, sodden, bibulous, reddish-orange, soon fading; context reddish-yellow, fleshy-tough to woody, juicy when fresh, rigid when dry, conspicuously zonate; tubes small, slender, thin-walled, brilliant orange when fresh, becoming dark, resinous and fragile on drying; spores smooth, hyaline."

[Basidiomycetae.]

CERRENELLA Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:361. 1905.

"Hymenophore thin, effused-reflexed, annual, epixylous; surface brown, zonate, anoderm, margin thin; context thin, coriaceous, brown; hymenium at first poroid, very soon becoming irpiciform, the teeth irregular and compressed; spores smooth, hyaline."

[Basidiomycetae.]

CORIOLELLUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:481. 1905.

"Hymenophore small, dry, annual, epixylous, semi-resupinate; surface white, anoderm, usually azonate; context white, thin, fibrous to corky; hymenium concolorous, tubes thin-walled, usually large and irregular, dentate, but not irpiciform; spores smooth, hyaline."

[Basidiomycetae.]

CORIOLOPSIS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:358. 1905.

"Hymenophore thin, flexible or rigid, annual, epixylous, sessile, dimidiate, often largely resupinate; surface light-brown, zonate, anoderm, hairy, margin thin; context thin, coriaceous to woody, pale ferruginous, sometimes almost white; hymenium concolorous, tubes small, regular, thin-walled, entire; spores smooth, hyaline."

[Basidiomycetae.]

CUBAMYCES Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:480. 1905.

"Hymenophore large, annual epixylous, sessile; thin, dry, conchate; surface pelliculose, glabrous, normally azonate; context white or yellowish, thin, homogeneous, very soft and elastic; hymenium concolorous, tubes small and regular, rather thick-walled, firm and corky, mouths entire, spores smooth, hyaline."

[Basidiomycetae.]

DENDROPHAGUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:473. 1905. non Toumey 1900.

"Hymenophore very large, but of light weight, annual epixylous, sessile, dimidiate, thick and pulvinate; surface pelliculose, glabrous, azonate, margin very obtuse; context very thick, soft and spongy throughout; tubes small, dark-colored, thin-walled, fragile; spores smooth, hyaline."

[See *Tomophagus* Murr.]

[Basidiomycetae.]

EARLIELLA Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:478. 1905.

"Hymenophore medium to large, annual, epixylous, semi-resupinate, thin and red but rigid; surface pelliculose, glabrous, zonate, more or less reddish-brown in color; context white, coriaceous, zonate; hymenium flesh-colored, tubes medium, irregular, becoming thin-walled; spores smooth, hyaline."

[Basidiomycetae.]

FLAVIPORELLUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:485. 1905.

"Hymenophore small, annual, epixylous, sessile or substipitate, flabelliform, yellow throughout; surface anoderm, margin thin; context very thin and friable; tubes small, thin-walled, fragile; spores smooth, hyaline or yellowish."

[Basidiomycetae.]

FLAVIPORUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:360. 1905.

"Hymenium annual, often reviving, epixylous, sessile, dimidiate, imbricate; surface encrusted, glabrous; context thick, woody, brown; tubes thin-walled, minute, regular; spores smooth, hyaline."

[Basidiomycetae.]

FOMITELLA Murrell n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:365. 1905.

"Hymenium sessile, at times semi-resupinate, applanate, epixylous; surface glabrous, anoderm to encrusted, sulcate with age; context woody or slightly punky, brownish-olivaceous, rarely varying to pallid; tubes minute, cylindrical, usually thick-walled, rarely stratose; spores smooth, hyaline."

[Basidiomycetae.]

GASTROSPORIUM Mattiolo n. g. Lycoperdales. Memorie della Reale Accademie Scienze di Torino, II. 53:361. 1903.

"Il *Gastrosporium*, come indica il nome, è formato da una cavità ripiena di innumerabili minutissime spore, limita da una parete doppia."

"Il corpo fruttifero globoso-lobato è di color bianco latteo, di grossezza che varia da quella di un pisello a quella di una noce, misurando il più grosso esemplare esaminato un diametro di circa tre cent."

"Il *Peridio* è formato da due strati nettamente differenziati."



"L'esterno, dello spessore di circa  $\frac{1}{2}$  mill. puerulento, calceo, risulta (negli esemplarè essiccati) composto di un materiale farinoso, facilmente esportabile colle dita." \* \* \* \* \*

"L'interno strato, spesso circa  $\frac{1}{3}$  di mill., e quindi meno sviluppato di quello esterno, nettamente dal primo differenziato, risulta di ife saldate fra di loro intimamente da una gelatina tenace, brillante."

"Le Gleba è formata da una massa di sostanza avente colore olivaceo chiaro, composta niente altro che da spore piccolissime, misuranti vel diametro circa 3 micra, a contorno circolare o leggermente ovale, le quali, solamente a forte ingrandimento, lasciano scorgere ancora il puto di attocco collo sterigma."

[Basidiomycetae.]

IRPICIPORUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:471. 1905.

"Hymenophore annual, epixylous, sessile, effused-reflexed, white or pallid throughout; surface anoderm, glabrous or velvety, not distinctly zonate, margin acute; context thin, leathery, pallid or brown; tubes alveolar; spores smooth, hyaline."

[Basidiomycetae.]

MICROPORELLUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:483. 1905.

"Hymenophore thin, annual, epixylous, usually flabelliform, stipitate, the stipe variously attacked and sometimes much reduced; surface anoderm; multizonate; context thin, white, fibrous, rigid and fragile when dry; tubes very minute, regular, thin-walled, fragile when dry; spores smooth, hyaline."

[Basidiomycetae.]

NIGROPORUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:361. 1905.

"Hymenium annual, epixylous, dimidiate-sessile to flabelliform, glabrous; context dark-brown, firm, homogeneous; tubes short, slender, thin-walled, black; spores smooth, hyaline."

[Basidiomycetae.]

PHAEOLOPSIS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:489. 1905.

"Hymenophore annual, epixylous, stipitate; surface azonate, anoderm, yellow or brown; margin acute; context yellow, fleshy to tough and fibrous, not friable; tubes yellow, regular, minute, thin-walled; spores smooth, hyaline; stipe excentric or lateral with substance and surface like that of the pileus."

[Basidiomycetae.]

PORODAEDALEA Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:367. 1905.

"Hymenophore large, perennial, epixylous, sessile, conchate to ungulate, surface anoderm, sulcate, usually rough; context

brown and woody; tubes concolorous, rarely in distinct layers, the hymenium varying from porose to daedaleoid; spores smooth, hyaline at maturity, becoming brownish with age, cystidia conspicuous."

[Basidiomycetae.]

PYCNOPORELLUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:489. 1905.

"Hymenophore annual, epixylous, sessile, dimidiate, simple or imbricate, reddish or orange-colored throughout; surface anoderm, margin thin; context thin, friable; tubes thin-walled, fragile, at length lacerate; spores smooth, hyaline or pale yellowish."

[Basidiomycetae.]

RIGIDOPORUS Murrill n. g. Polyporaceae. Bulletin of the Torrey Botanical Club, 32:478. 1905.

"Hymenophore annual, at times reviving, epixylous, sessile, dimidiate, conchate, simple or imbricate; surface pelliculose, multizonate, margin thin, incurved when dry; context thin, white, woody, very rigid when dry, tubes minute, regular, light brown, mouths pruinose when young; spores smooth, hyaline."

[Basidiomycetae.]

TOMOPHAGUS Murrill n. n. Polyporaceae. (Dendrophagus Murr. non Toumey.) Torrey 5:197. 1905.

## VIII. DEUTEROMYCETAE.

[Deuteromycetae.]

ASTEROTHYRIUM P. Hennings n. g. Leptostromataceae. Botanische Jahrbücher für Systematik, Pflanzengeschichte und Pflanzengeographie, 34:54. 1904.

"Perithecia membranacea, dimidiato-scutellata, atra, poro pertusa, hyphis circumdata. Conidia oblonge fusioidea, 3 septata, hyalina. Cystothyrio, Discosiae aff."

[Deuteromycetae.]

DIDYMOBOTRYOPSIS P. Hennings n. g. Stilbaceae. Hedwigia 41:149. 1902.

"Mycelium effusum, albidum; stromata subcylindracea e hyphis hyalinis coalitis conflata, apice fimbriata. Conidiophora subulata. Conidia acrogena singularia, oblonga, hyalina, 1-septata. Didymobotryo Sacc. aff."

[Deuteromycetae.]

GLIOMASTIX Guéguen n. g. Dematiaceae. Bulletin Trimestriel de la Société mycologique de France, 21:240. 1905.

"Hyphae steriles decumbentes; fertiles breves, simplices aut subsimplices. Conidia mucilaginea catenata, terminaliter conglobata, turbulo brunneo e membrana conidiophori innata, mox annulari segmentatione tubuli denudata, inde disjunctores toriformes, inter conidias insertis."

[Deuteromycetae.]

MADURELLA Brumpt. n. g. Mucedineae. Comptes Rendus Hebdomadaires des séances de la Société de Biologie 58:999. 1905.

Mucédinée à thalle blanc, vivant en parasite dans divers tissus animaux (os, muscles, tissu conjonctif), possédant dans sa vie végétative des filaments d'un diamètre toujours supérieur à  $1\ \mu$  et pouvant atteindre 8 à  $10\ \mu$ . Ces filaments sont cloisonnés et se ramifient de temps à autre, ils sécrétant une substance brune. En vieillissant, ces filaments s'organisent en sclérote et leur paroi s'imprègne quelquefois de pigment brun. Dans ce sclérote se rencontrent en quantité variable des corpuscles arrondis de 8 à  $30\ \mu$  de diamètre (chlamydospores?)."

[Deuteromycetae.]

MONILITES Pampaloni n. g. Moniliaceae. Atti della Reale Accademie dei Lincei, V. 11:252. 1902. Fossil.

"Hyphae septatae, hyalinae, vage ramosae, effusae; conidia globoso, elliptica,  $18-21\ \mu$ , utrinque obtusa, in catenas breves, interdum ramosas disposita, hyalina, laevia."

[Deuteromycetae.]

PHOMOPSIS Sacc. n. g. Sphaeropsideae. Annales Mycologici, 3:166. 1905.

"Pycnidio subcutanea, plus minus erumpentia, globosa-depressa, saepe longitudinaliter oblonga, non raro supra latiuscule aperta nec regulariter ostiolata, nigricantia, gregaria. Sporulae fusoides-oblongae, rarius ellipsoideae, typice 2-guttulatae. Basidia filiformia v. acicularia, saepe demum secedentia et incurvata."

[Deuteromycetae.]

SARCINOCHTHUM von Höhnelt n. g. Tuberculariaceae. Oesterreichische Botanische Zeitschrift, 55:16. 1905.

"Épidochien oberflächlich, gelatinös, lebhaft, gefärbt aus einem lockenzelligen Grundgewebe bestehend, das nach aussen allmählich in kurze, einfache oder wenig und unregelmässig verzweigte Sporenträger übergeht, die an der Spitze gehäuft, wenig teils einzellige, teils zwei-bis vier-zellige, kreuzförmig geteilte, rundliche oder längliche, hyaline Sporen bilden. Saprophyt."

[Deuteromycetae.]

TETRACOCOPORIUM Szabó n. g. Dematiaceae. Hedwigia, 44:77. f. a-b. 1905.

"Cespitulis effusis criseis, hyphis hyalino-sub-fuscis, septatis, ramosis, conidiis globosis, ramorum apicem acrogenis, atro-brunneis, duobus parietibus verticalibus angula recto inter se sitis partitis."

[Deuteromycetae.]

THYRSIDINA von Höhnelt n. g. Melanconieae. Annales Mycologici, 2:337. 1905.



"Pilz lebhaft gefärbt, gelatinös-fleischig, hervorbrechend. Stroma hell gefärbt, dick, aus plectenchymatisch verflochtenen Hyphen bestehend, die an der Spitze noch im Innern des Stroma je eine hyalodictiee, rundliche Spore entwickeln, die allmählich heranreifend an die Oberfläche kommt. Sporen schleimig verbunden."

## MYCELIA STERILIA.

[Mycelia Sterilia.]

MYCORRHIZONIUM Weiss, new fossil form-genus of Mycorrhiza. *Annals of Botany* 18:255-265. pl. 18-19. 1904. No species described.

## INDEX TO THE GENERA.

- |                       |                     |                        |
|-----------------------|---------------------|------------------------|
| Acanthostigmella, 62  | Englerula, 63       | Peronosplasmopara, 61  |
| Actinomucor, 60       | Feracia, 63         | Phaeolopsis, 99        |
| Actinocephalum, 60    | Flaviporellus, 98   | Phaeosacardinula, 65   |
| Amauroderma, 96       | Flaviporus, 98      | Phloeophthora, 61      |
| Anixiella, 62         | Fomitella, 98       | Phomopsis, 101         |
| Aplanobacler, 60      | Gastrosporium, 98   | Phragmidiella, 96      |
| Asterothyrium, 100    | Gastrina, 64        | Phragmographum, 65     |
| Aurantiporellus, 96   | Gliomastix, 100     | Porodaelea, 99         |
| Aurantiporus, 97      | Henningsomyces, 64  | Pteromyces, 66         |
| Baeodromus, 95        | Hypostomaceae, 64   | Pycnoporellus, 100     |
| Calliospora, 96       | Hypoxylina, 64      | Pythites, 61           |
| Cerrenella, 97        | Irpiciporus, 99     | Rigidoporus, 100       |
| Chaetomites, 62       | Lentomitella, 64    | Robertomyces, 66       |
| Coriollus, 97         | Madurella, 101      | Rolandia, 66           |
| Coriopsis, 97         | Melanosporites, 64  | Saitomyces, 61         |
| Cryptosporina, 63     | Microporellus, 99   | Sarcinodochium, 101    |
| Cubamyces, 97         | Microthyrites, 64   | Seuratiaceae, 66       |
| Dendrophagus, 97      | Mitruliopsis, 64    | Tetracoccusporium, 101 |
| Dendrostilbella, 63   | Monilites, 101      | Thamnocephalis, 62     |
| Distichomyces, 95     | Mycorrhizonium, 102 | Thyrsidina, 101        |
| Dictyonina, 63        | Nematospora, 65     | Tomophagus, 100        |
| Didymascina, 63       | Nigroporus, 99      | Uncinulites, 66        |
| Didymobotryopsis, 100 | Nigrosphaeria, 65   | Unguicularia, 66       |
| Earliella, 98         | Paranectriella, 65  | Uromycladium, 96       |
| Euanixia, 63          | Perisporites, 65    | Zygorhizidium, 62      |

## INDEX TO NORTH AMERICAN MYCOLOGY.

*Alphabetical List of Articles, Authors, Subjects, New Species and Hosts, New Names and Synonyms.*

W. A. KELLERMAN.

(Continued from Page 79.)

EUSTACE, H. J., *see* Stewart, F. C., Eustace, H. J., and Sirrine, F. A. . . .

EVERHART, Benjamin Matlack. Obituary. *Jour. Mycol.* 10:225. Sept. 1904.

- EYSENHARDTIA amorphoides H. B. K., host to Calliospora holwayi Arthur n. sp. Bot. Gaz. 39:390. June 1905.
- EYSENHARDTIA orthocarpa Wats., host to Calliospora holwayi Arthur n. sp. Bot. Gaz. 39:390. June 1905.
- FAGUS, wood, host to Caryospora cariosa Fairman n. sp. Proc. Rochester Acad. Sci. 4:190. 2 Sept. 1905.
- FAIRMAN, Charles E. The Pyrenomyceteae of Orleans County, N. Y. Proc. Rochester Acad. Sci. 4:165-191. 2 Sept. 1905.
- FAIRMAN, Charles E. Some New Fungi from Western New York. Jour. Mycol. 10:229-231. Sept. 1904.
- FALCATA comosa (L.) Kunze, host to Aecidium falcatae Arthur n. sp. Bull. Torr. Bot. Club, 33:32. Jan. 1906.
- FAVOLUS, *see Polyporaceae of North America, X* . . . .
- FAVOLUS tenuis (Hook.) Murrill n. n. [Boletus reticulatus Hook., B. tenuis Hook., Polyporus polygrammus Mont., Hexagona tenuis Fr., H. polygramma Fr., H. favoloides Peck.] Bull. Torr. Bot. Club, 32:100. Feb. 1905.
- FAVOLUS variegatus (Berk.) Murrill n. n. [Hexagona variegata Berk.] Bull. Torr. Bot. Club, 32:101. Feb. 1905.
- FERTILIZATION in Saprolegniales. B. M. Davis. Bot. Gaz. 39:61-4. Jan. 1905.
- FERTILIZATION IN THE SAPROLEGNIALES. A. H. Trow. Bot. Gaz. 39:300. April 1905.
- FESTUCA jonesii Vasey, *see Festuca subulata Trin.* . . . .
- FESTUCA pacifica Piper ined., host to Puccinia piperi Ricker n. sp. Jour. Mycol. 11:114. May 1905.
- FESTUCA subulata Trin. (F. jonesii Vasey), host to Puccinia kreageri Ricker n. sp. Jour. Mycol. 11:114. May 1905.
- FIMBRYSTILIS holmayana Fernald, host to Puccinia fimbrystilidis Arthur n. sp. [Mexico.] Bull. Torr. Bot. Club, 33:28. Jan. 1906.
- FIMBRYSTILIS polymorpha Breckl., host to Puccinia fimbrystilidis Arthur n. sp. [Mexico.] Bull. Torr. Bot. Club, 33:28. Jan. 1906.
- FIMBRYSTILIS sp., host to Puccinia fimbrystilidis Arthur n. sp. [Mexico.] Bull. Torr. Bot. Club, 33:28. Jan. 1906.
- FLAMMULA braendleri Peck n. sp., single or cespitose on decaying trunks. Bull. Torr. Bot. Club, 31:180. Apr. 1904.
- FLAMMULA eccentrica Peck n. sp., on decaying wood. Bull. Torr. Bot. Club, 31:179. Apr. 1904.

- FLAMMULA multifolia Peck n. sp., decaying wood in ravines.  
Bull. Terr. Bot. Club, 32:79. Feb. 1905.
- FLAMMULA paradoxa Kalch., *syn. of Boletinus rhodoxanthus q. v.*
- FLAMMULA rhodoxanthus Lloyd Myc. Notes, *syn. of Boletinus rhodoxanthus q. v.*
- FLAMMULA tammi Fr., *syn. of Boletinus rhodoxanthus q. v.*
- FLY Agaric, Another. [*Amanita olitoria* Bull.] D. R. Sumstine.  
Jour. Mycol. 11:267. Nov. 1905.
- FOMES auberianus (Mont.) Murrill n. n. [*Polyporus auberianus* Mont.] Bull. Torr. Bot. Club, 32:491. Sept. 1905.
- FOMITEAE, synopsis of, with white or flesh-colored context  
[Murrill]. Bull. Torr. Bot. Club, 32:490. Sept. 1905.
- FRASERA macrophyllum Greene, host to *Uromyces speciosus* Holway n. sp. Ann. Mycolog. 3:23. Feb. 1905.
- FUNGI, Dairy, *see Dairy Fungi, Some Suggestions* . . . .
- FUNGI collected in New Mexico. [List of 46 species.] T. D. A. Cockerell. Jour. Mycol. 10:49-51. Mar. 1904.
- FUNGI, New Species [Peck], *see New Species of* . . . .
- FUNGI, Notes on, II, with New Species, *see Notes on* . . . .
- GENERA Balansia and Dothichloë in the United States with a consideration of their economic importance. Geo. F. Atkinson.  
Jour. Mycol. 11:248-267. Pl. 81-88. Nov. 1905.
- GENTIANA acuta Mx. [Mexico], host to *Uromyces gentianae* Arth. Ann. Mycolog. 3:22. Feb. 1905.
- GENTIANA heterosepala Englm., host to *Uromyces gentianae* Arth. Ann. Mycolog. 3:22. Feb. 1905.
- GENTIANA quinquefolia occidentalis Hitchcock, host to *Uromyces gentianae* Arth. Ann. Mycolog. 3:22. Feb. 1905.
- GEOPYXIS nebulosoides Peck n. sp., decorticated wood. Bull. Torr. Bot. Club, 32:80. Feb. 1905.
- GLEDITSIA, wood of trunk, host to *Kalmusia aspera* Morgan n. sp. Jour. Mycol. 11:153. July 1905.
- GLOEOSPORIUM obtogens Syd. n. sp., in frondibus vivis *Pteridi aquilini* var. lanuginosi. Ann. Mycolog. 2:172. Mar. 1904.
- GOMPHIDIUS Rhodoxanthus Once More. [Note and synonymy.] D. R. Sumstine. Jour. Mycol. 11:165-166. July 1905.
- GOMPHUS rhodoxanthus Schw., *syn. of Boletinus rhodoxanthus q. v.*
- GOUANIA tomentosa Jacq., host to *Puccinia gouaniae* Holway n. sp. [Cuba.]. Ann. Mycolog. 3:21. Feb. 1905.
- GRIFOLIA fractipes (B. & C.) Murrill n. n. [*Polyporus fractipes* B. & C.] Bull. Torr. Bot. Club, 31:338. June 1904.



- GYMNOSPORANGIUM *juniperi-virginianae* Schw. [Cultures on Apple. Arthur.] Jour. Mycol. 12:14. Jan. 1906.
- HAMAMELIS *virginica*, host to *Sphaeropsis hamamelidia* Fl. Tassin. sp. Bull. Lab. ed Orto Bot. 6:126. 1904.
- HAPLOSPORELLA *cercidis* E. & B., on dead limbs of *Cercis canadensis*. Jour. Mycol. 11:108. May 1905.
- HAPLOSPORELLA *diatrypoides* E. & B., on dead limbs of *Ulmus pubescens*. Jour. Mycol. 11:108. May 1905.
- HAPLOSPORELLAS, Two New. J. B. Ellis and E. Batholomew. Jour. Mycol. 11:108. May 1905.
- HELOTIUM *vitellinum* Rehm, var. *pallido-striatum* Fairman n. var., on fallen petioles in the woods. Jour. Mycol. 10:231. Sept. 1904.
- HELVELLA *stevensii* Peck, n. sp., open woods of oak and hickory. Bull. Torr. Bot. Club, 31:182. Apr. 1904.
- HEXAGONA *favoloides* Peck, *syn. of Favolus tenuis* q. v.
- HEXAGONA *polygramma* Fr., *syn. of Favolus tenuis* q. v.
- HEXAGONA *sericea* Fr., *syn. of Coriolus sericeohirsutus* q. v.
- HEXAGONA *tenuis* Fr., *syn. of Favolus tenuis* q. v.
- HEXAGONA *variegata* Berk., *syn. of Favolus variegatus* q. v.
- HOLWAY, E. W. D. North American *Salvia* Rusts. Jour. Mycol. 11:156-8. July, 1905.
- HOLWAY, E. W. D. North American Uredineae. [Several new species, etc.] Ann. Mycolog. 3:20-24. Feb. 1905.
- HOLWAY, E. W. D. Notes on Uredineae, III. [*Puccinia atrofusca* (Dudley & Thompson) Holway n. n.] Jour. Mycol. 10:228. Sept. 1904.
- HOLWAY, E. W. D. Notes on Uredineae, IV. Jour. Mycol. 11:268. Nov. 1905.
- HOST Plants of *Panaeolus Epimyces* Peck. Helen Sherman. Jour. Mycol. 11:167-9. Pl. 80. July 1905.
- HYPHOLOMA *pecosense* Cockerell n. sp. Jour. Mycol. 10:108. May 1904.
- HYPOCREA *alutacea*, Life history of. George F. Atkinson. Bot. Gaz. 40:401-416. Pl. XIV-XVI. Dec. 1905.
- HYPOCREA *alutacea* Tul., *syn. of Podostroma alutacea* q. v.
- HYPOCREA *atramentosa* B. & C., *syn. of Dothichloe atramentosa* q. v.
- HYPOCRELLA *atramentosa* Sacc., Mich., *syn. of Dothichloe atramentosa* q. v.
- HYPOCRELLA *hypoxylon* Ellis, p. p. N. A. Pyr., *syn. of Dothichloe atramentosa* q. v.

HYPOCRELLA hypoxylon E. & E., *syn. of Dothichloe atramentosa* q. v.

HYPOCRELLA hypoxylon Sacc. Syll. & Ellis p. p., *syn. of Balansia hypoxylon* q. v.

HYPOCREA lloydii Bresadola, *syn. of Podostroma alutacea* q. v.

HYALOSPORA pellaicola Arthur n. sp., on *Pellaea andromedaefolio* (Kaulf.) Fée, and *Cryptogramme stelleri* (Gmel.) prantl, (*Pellaea gracilis* Hook.) Bull. Torr. Bot. Club, 33:30. Jan. 1906.

INDEX to North American Mycology (continued). W. A. Kellerman. Jour. Mycol. 116-143. May 1904.

INDEX to North American Mycology (continued). W. A. Kellerman. Jour. Mycol. 10:251-283. Sept. 1904.

INDEX to Journal of Mycology, volumes 1-10. Jour. Mycol. 10:289-387. Nov. 1904.

INDEX to North American Mycology (continued). W. A. Kellerman. Jour. Mycol. 11:125-148. May 1905.

INDEX to North American Mycology (continued). W. A. Kellerman. Jour. Mycol. 11:190-9. July 1905.

INDEX to North American Mycology (continued). W. A. Kellerman. Jour. Mycol. 11:217-231. Sept. 1905.

*Discard Ionotus amplexans* Murrill n. sp., etc., and insert:

INONOTUS amplexans Murrill n. sp.; the fruit-bodies were found encircling living twigs of *Asimina parviflora* (?). Bull. Torr. Bot. Club, 31:600. Nov. 1904.

*Discard Ionotus corrosus* Murrill n. sp., etc., and insert:

INONOTUS corrosus Murrill n. sp. Bull. Torr. Bot. Club, 31:598. Nov. 1904.

*Discard Ionotus dryophilus* (Berk.) Murrill n. n., etc., and insert:

INONOTUS dryophilus (Berk.) Murrill n. n. [*Polyporus dryophilus* Berk.] Bull. Torr. Bot. Club, 31:597. Nov. 1904.

INONOTUS fibrillosus Karst., *syn. of Pycnoporellus fibrillosus* q. v.

*Discard Ionotus fruticum* (B. & C.) Murrill n. n., etc., and insert:

INONOTUS fruticum (B. & C.) Murrill n. n. [*Polyporus fruticum* B. & C.] Bull. Torr. Bot. Club, 31:601. Nov. 1904.

*Discard Ionotus hirsutus* (Scop.) Karst., etc., and insert:

INONOTUS hirsutus (Scop.) Karst. [*Boletus hirsutus* Scop., *B. spongiosus* Lightf., *B. hispidus* Bull., *B. flavus* Poll., *Polyporus hispidus* Fr., *P. endocrinus* Berk., *Inodermus hispidus* Quell.] Bull. Torr. Bot. Club, 31:594. Nov. 1904.

*Discard Ionotus jamaicensis* Murrill n. sp., etc., and insert:

INONOTUS jamaicensis Murrill n. sp. Bull. Torr. Bot. Club, 31:597. Nov. 1904.

*Discard Ionotus Karst. [Inoderma Karst.], etc., and insert:*

INONOTUS Karst. [Inoderma Karst.] Bull. Torr. Bot. Club, 31:593. Nov. 1904.

*Discard Inonotus, Key to the North American species, etc., and insert:*

INONOTUS, Key to the North American species. [Murrill.] Bull. Torr. Bot. Club, 31:594. Nov. 1904.

*Discard Inonotus perplanus (Peck) Murrill n. n., etc., and insert:*

INONOTUS perplexus (Peck) Murrill n. n. [Polyporus perplexus Peck.] Bull. Torr. Bot. Club, 31:596. Nov. 1904.

*Discard Ionotus pusillus Murrill n. sp., etc., and insert:*

INONOTUS pusillus Murrill n. sp.; the tiny brown sporophores were found in large numbers emerging from the lenticels of small dead branches of Jacquinia. Bull. Torr. Bot. Club, 31:599. Nov. 1904.

*Discard Ionotus radiatus (Sowerby) Karst, etc., and insert:*

INONOTUS radiatus (Sowerby) Karst. [Boletus radiatus Sowerby, Polyporus radiatus Fr., P. glomeratus Peck, Inoderma radiatum Karst.] Bull. Torr. Bot. Club, 31:599. Nov. 1904.

*Discard Ionotus texanus Murrill n. sp., etc., and insert:*

INONOTUS texanus Murrill n. sp., on a Mesquite (?) tree. Bull. Torr. Bot. Club, 31:597. Nov. 1904.

*Discard Ionotus wilsonii Murrill n. sp., etc., and insert:*

INONOTUS wilsonii Murrill n. sp., on decaying logs. Bull. Torr. Bot. Club, 31:598. Nov. 1904.

JECZEWSKI, Year Book of Diseases, *see Review of* . . .

JONES, L. R. and Morse, W. J. Disease Resistance of Potatoes, Plant Diseases in Vermont in 1904, Potato Diseases and their remedies. [Experiments and general account; not taxonomic.] An. Rep. Vermont Agr. Exp. Sta., 18:264-291. 1905.

JUNIPERUS virginiana, host to Melanomma juniperi Ellis & Everhart n. sp. Proc. Rochester Acad. Sci. 4:190. 2 Sept. 1905.

KALMUSIA, A New Species of. A. P. Morgan. Jour. Mycol. 11:153. July 1905.

KALMUSIA aspera Morgan n. sp., growing on the hard wood of a prostrate trunk of Gleditsia. Jour. Mycol. 11:153. July 1905.

KARSCHIA crassa Fairman n. sp., on decaying wood in the woods. Jour. Mycol. 10:229. Sept. 1904.

KAUFFMAN, Calvin Henry. The genus Cortinarius: a preliminary study. Bull. Torr. Bot. Club, 32:301-325. 7 figs. June 1905.

KELLERMAN, W. A. Elementary Mycology. Jour. Mycol. 10:90-5. Mar. 1904.



- KELLERMAN, W. A. Elementary Mycology, continued. Jour. Mycol. 10:144-9. May 1904.
- KELLERMAN, W. A. Index to North American Mycology (continued). Jour. Mycol. 11:6-143. May 1904.
- KELLERMAN, W. A. Index to North American Mycology (continued). Jour. Mycol. 10:251-283. Sept. 1904.
- KELLERMAN, W. A. Index to North American Mycology (continued). Jour. Mycol. 11:125-148. May 1905.
- KELLERMAN, W. A. Index to North American Mycology (continued). Jour. Mycol. 11:190-9. July 1905.
- KELLERMAN, W. A. Minor Mycological Notes, III. [*Podosphaera tridactyla*; Abnormal *Collybia radicata*.] Jour. Mycol. 10:62-4. Mar. 1904.
- KELLERMAN, W. A. Minor Mycological Notes, IV. [*Uncinula parvula*; Mycological Flora of Cedar Point.] Jour. Mycol. 10:114-6. May 1904.
- KELLERMAN, W. A. Mycological Bulletin [24 Nos.] Vol. 3. 1905.
- KELLERMAN, W. A. A New species of *Naemosphaera* [*N. lactucicola*]. Jour. Mycol. 10:113-4. May 1904.
- KELLERMAN, W. A. Notes from Mycological Literature, IX. Jour. Mycol. 10:81-90. Mar. 1904.
- KELLERMAN, W. A. Notes from Mycological Literature, X. Jour. Mycol. 10:156-8. May 1904.
- KELLERMAN, W. A. Notes from Mycological Literature, XV. Jour. Mycol. 11:149-151. May 1905.
- KELLERMAN, W. A. Notes from Mycological Literature, XVI. Jour. Mycol. 11:180-190. July 1905.
- KELLERMAN, W. A. Notes from Mycological Literature, XVII. Jour. Mycol. 11:271-2. Nov. 1905.
- KELLERMAN, W. A. Notes from Mycological Literature, XVIII. Jour. Mycol. 12:32-9. Jan. 1906.
- KELLERMAN, W. A. Ohio Fungi Fascicle IX. [Labels.] Jour. Mycol. 10:55-62. Mar. 1904.
- KELLERMAN, W. A. and Ricker, P. L. New Genera of Fungi published since the year 1900, with citation and original descriptions (continued). Jour. Mycol. 10:232-250. Sept. 1904.
- KELLERMAN, W. A. Uredineous culture experiments with *Puccinia sorghi*. 1905. Jour. Mycol. 12:9-11. Jan. 1906.
- KEY to Agaricaceae [Murrill], *see Agaricaceae, synopsis* . . . .
- KEY to the brown sessile Polyporaceae, *see Polyporaceae* . . . .
- KEY to the common species of *Clitopilus*, *see Clitopilus, Key* . . . .
- KEY to the *Cortinari*, *see Cortinari, Partial Key* . . . .

- KEY to the Fomiteae, *see Fomiteae, synopsis* . . . . .
- KEY to the North American species of Bjerkandera. [Murrill.]  
Bull. Torr. Bot. Club, 32:636. Dec. 1905.
- KEY to the North American species of Trametes. [Murrill.]  
Bull. Torr. Bot. Club, 32:637. Dec. 1905.
- KEY to the North American species of Coriolus. [Murrill.] Bull.  
Torr. Bot. Club, 32:641. Dec. 1905.
- LACHNEA fusicarpa (Ger.) Sacc., *syn. of Macropodia fusicarpa*  
*q. v.*
- LACHNEA hainesii (Ell.) Sacc., *syn. of Macropodia semitosta*  
*q. v.*
- LACHNUM atropurpureum Durand n. sp., on Eucalytus. Jour.  
Mycol. 10:100. May 1904.
- LACTUCA virosa, host to Naemosphaera lactucicola Kellerm. n.  
sp. Jour. Mycol. 10:114. May 1904.
- LASIOSPHAERIA hirsuta (Fr.) var. terristris Sacc., *syn. of Lasio-*  
*sphaeria uliginosa q. v.*
- LASIOSPHAERIA ovina (Pers.) Fuckel, var. aurelia Fairman n.  
var. Sphaeria ovina Pers.), on the surface of wood (Tilia  
americana, Basswood?). Jour. Mycol. 10:229. Sept. 1904.
- LASIOSPHAERIA uliginosa (Fries). L. hirsuta (Fr.) var. ter-  
restris Sacc. [Morgan.] Jour. Mycol. 10:227. Sept. 1904.
- LAWRENCE, W. H. Blackspot Canker and Blackspot Apple Rot.  
Jour. Mycol. 11:164-5. July 1905.
- LEGUMINOUS Rusts from Mexico. J. C. Arthur. Bot. Gaz. 39:  
385-396. June 1905.
- LEHMAN, E. A. North Carolina Fungi — The Academy [Wins-  
ton-Salem, N. C.], vol. XXVII, 1904, p. 4031-4037, Fig. 1-4.  
[From Ann. Mycolog. Feb. 1905, p. 87.]
- LENZITES bicolor Fr., *syn. of Agaricus confragosus (Bolt.) Mur-*  
*rill q. v.*
- LENZITES cookeii Berk., *syn. of Agaricus confragosus (Bolt.)*  
*Murrill q. v.*
- LENZITES crataegi Berk., *syn. of Agaricus confragosus (Bolt.)*  
*Murrill q. v.*
- LENZITES deplanata Fr., *syn. of Agaricus deplanatus q. v.*
- LENZITES glaberrima B. & C., *syn. of Agaricus aesculi q. v.*
- LENZITES klotzschii Berk., *syn. of Agaricus confragosus (Bolt.)*  
*Murrill q. v.*
- LENZITES proxima Berk., *syn. of Agaricus confragosus (Bolt.)*  
*Murrill q. v.*
- LENZITES *see Polyporaceae of North America, X* . . . . .
- LENZITES unguiformis B. & C., *syn. of Agaricus confragosus*  
*(Bolt.) Murrill q. v.*

- LEPIOTA brunnescens Peck n. sp., open wood and grassy places. Bull. Torr. Bot. Club, 31:177. Apr. 1904.
- LEPIOTA glatfelteri Peck n. sp., ground in woods. Bull. Torr. Bot. Club, 31:177. Apr. 1904.
- LEPTOPORUS pubescens Pat., *syn. of Coriolus pubescens* q. v.
- LIFE history of *Hypocrea alutacea*. George F. Atkinson. Bot. Gaz. 40:401-416. Pl. XIV-XVI. Dec. 1905.
- LISIANTHUS exsertus, host to *Phyllosticta lisianthi* Sny. n. sp. Ann. Mycol. 2:171. Mar. 1904.
- LLOYD, C. G. The Lycoperdaceae of Australia, New Zealand, and neighboring islands. Illustrated with 15 plates and 49 figures [42 pp.]. Issued at the Lloyd Library, Cincinnati, April 1905.
- LOESELIA ciliata, host to *Puccinia fumosa* Holway n. sp. Ann. Mycol. 3:23. Feb. 1905.
- LOESELIA coccinea Don., host to *Puccinia fumosa* Holway n. sp. Ann. Mycol. 3:23. Feb. 1905.
- LOESELIA glandulosa, host to *Puccinia fumosa* Holway n. sp. Ann. Mycol. 3:23. Feb. 1905.
- LOPHIOSTOMA cephalanthi Fairman n. sp., on decortiated area of branch of *Cephalanthus occidentalis*. Jour. Mycol. 10:230. Sept. 1904.
- LOPHIOSTOMA imperfecta Ellis & Fairman n. sp., on dead stems of *Asclepias*? Proc. Rochester Acad. Sci. 4:187. 2 Sept. 1905.
- LUPINUS mexicana H. B. K., host to *Uromyces montanus* Arthur n. sp. Bot. Gaz. 39:386. June 1905.
- LUPINUS sparsiflorus, host to *Placosphaeria lupini* Sny. n. sp. Ann. Mycol. 2:172. Mar. 1904.
- LUPINUS sp., host to *Uromyces rugosa* Arthur n. sp. Got. Gaz. 39:386. June 1905.
- LYCOPERDACEAE, The, of Australia, New Zealand, and neighboring islands. Illustrated with 15 plates and 49 figures [42 pp.]. C. G. Lloyd. Issued at the Lloyd Library, Cincinnati, April 1905.
- LYSILOMA terginina Benth., host to *Ravenelia lysilomae* Arthur n. sp. Bot. Gaz. 39:392. June 1905.
- MACROPODIA fusicarpa (Ger.) Durand. [*Peziza fusicarpa* Ger., *Peziza* (*Sarcoscyphae*) *pubida* B. & C., *Macropodia pubida* (B. & C.) Sacc., *Lachnea fusicarpa* (Ger.) Sacc., *Peziza velutina* B. & C. (ined.) in Curtis Bot. N. Car., *Peziza morgani* Mass. Durand.] Jour. Mycol. 12:29. Jan. 1906.
- MACROPODIA pubida (B. & C.) Sacc., *syn. of Macropodia fusicarpa* q. v.

- MAROPODIA semitosta (B. & C.) Sacc. [Peziza (Sarcoscypha) semitosta B. & C., Peziza hainesii Ell., Lachnea hainesii (Ell.) Sacc. Durand.] Jour. Mycol. 12:31. Jan. 1906.
- MAPLE, bark, host to Anthostoma acerinum Ellis & Fairman n. sp. Proc. Rochester Acad. Sci. 4:189. 2 Sept. 1905.
- MARASMIUS bellipes Morgan n. sp., growing on old leaves of deciduous trees. Jour. Mycol. 11:207. Sept. 1905.
- MARASMIUS copelandi Peck n. sp., on dead leaves of Quercus densiflora. Bull. Torr. Bot. Club, 31:182. Apr. 1904.
- MARASMIUS delectans Morgan n. sp., growing on the ground among fallen twigs and leaves. Jour. Mycol. 11:206. Sept. 1905.
- MARASMIUS felix Morgan n. sp., growing on leaves of Platanus insititious on the petioles and veins. Jour. Mycol. 12:2. Jan. 1906.
- MARASMIUS, North American species of. [Monograph.] A. P. Morgan. Jour. Mycol. 11:201-212, 234-247. Sept. and Nov. 1905. 12:1-9. Jan. 1906.
- MARASMIUS nuptialis Morgan n. sp., growing on rotten wood among old leaves. Jour. Mycol. 11:238. Nov. 1905.
- MELANOMMA juniperi Ellis & Everhart n. sp., on loosely hanging bark of Juniperus virginiana. Proc. Rochester Acad. Sci. 4:190. 2 Sept. 1905.
- MELAMPSORA medusae Thuem. [Cultures on Larix laricina, and L. decidua. Arthur.] Jour. Mycol. 12:13. Jan. 1906.
- MELASMA thouiniaie Syd. n. sp., in foliis vivis Thouinia acuminata. [Mexico.] Ann. Mycolog. 2:171. Mar. 1904.
- MELICA smithii (Porter Vasey, host to Puccinia paradoxica Rick-er n. sp. Jour. Mycol. 11:114. May 1905.
- MELOGRAMMA patens Morgan n. sp., growing on dead branches of Carpinus americans. Jour. Mycol. 10:59. Mar. 1904.
- MENODORA scoparia, host to Coniothecium erumpens Sacc. et Syd. n. sp. Ann. Mycolog. 2:173. Mar. 1904.
- MERISMA Gill. non Pers., syn. of Bjerkanthera q. v.
- MESOSPHERUM pectinatum (L.) Kunze, host to Puccinia distorta Holway n. sp. Ann. Mycolog. 3:22. Feb. 1905.
- MESOSPHERUM sp., host to Puccinia distorta Holway n. sp. Ann. Mycolog. 3:22. Feb. 1905.
- MESQUITE, bark, host to Didymosphaeria cryptosphaetioides Rehm n. sp. Ann. Mycolog. 2:176. Mar. 1904.
- MICROCERA brachyspora Sacc. & Scalia n. sp., on the bark of some tree, associated with Nectria sanguinea. Alaska Har. Exped. 5:15. 5 April 1904.



- MICROMERIA *chamissonis*, host to *Puccinia micromeriae* Dudley & Thompson. Jour. Mycol. 10:55. Mar. 1904.
- MILESI, M. e Traverse G. B. Saggio di una monografia del genera *Traphragmium*. Ann. Mycolog. 2:143-156. Mar. 1904.
- MIMOSACEAE, an undetermined species of, host to *Ravenelia gracilis* Arthur n. sp. Bot. Gaz. 39:393. June 1905.
- MINOR Mycological Notes, III. [*Podosphaera tridactyla*; Abnormal *Collybia radicata*.] Jour. Mycol. 10:62-4. Mar. 1904.
- MINOR Mycological Notes, IV. [*Uncinula parvula*; Mycological Flora of Cedar Point, Ohio.] W. A. Kellerman. Jour. Mycol. 10:114-6. May 1904.
- MONARDELLA *undulata*, host to *Puccinia monardellae* Dudley & Thompson n. sp. Jour. Mycol. 10:54. Mar. 1904.
- MONARDELLA *villosa*, host to *Puccinia monardellae* Dudley & Thompson n. sp. Jour. Mycol. 10:54. Mar. 1904.
- MONASCUS *purpureus*, The Morphology of. Edgar W. Olive. Bot. Gaz. 39:56-60. Jan. 1905.
- MORCHELLA *esculenta* (L.) Pers., Remarkable occurrence of. W. O. Sturgis. Jour. Mycol. 11:269. Nov. 1905.
- MORGAN, A. P. A New *Chaetosphaera*. Jour. Mycol. 11:105. May, 1905.
- MORGAN, A. P. A New *Melogramma* [*M. patens*]. Jour. Mycol. 10:49. Mar. 1904.
- MORGAN, A. P. A New Species of *Kalmusia* [*K. aspera*]. Jour. Mycol. 11:153. July 1905.
- MORGAN, A. P. North American species of *Marasmius*. [Monograph.] Jour. Mycol. 11:201-212, 234-247. Sept. and Nov. 1905. 12:1-9. Jan. 1906.
- MORGAN, A. P., *Peziza pubida* B. & C. [Note.] Jour. Mycol. 11:154. July 1905.
- MORGAN, A. P. *Pyrenomyces* scarcely known in North America. [Notes on a few species.] Jour. Mycol. 10:226. Sept. 1904.
- MORGAN, A. P. *Tubercularia fasciculata* Tode. [Note.] Jour. Mycol. 10:97-8. May 1904.
- MORPHOLOGY of *Monascus purpureus*. Edgar W. Olive. Bot. Gaz. 39:56-60. Jan. 1905.
- MURRILL, William Alphonso. A Key to the brown sessile *Polyporaceae* of temperate North America. *Torreyia*, 5:194-5. Nov. 1905.

- MURRILL, William Alphonso. The Polyporaceae of North America, X. *Agaricus*, *Lenzites*, *Cerrena* and *Favolus*. Bull. Torr. Bot. Club, 32:83-103. Feb. 1905.
- MURRILL, William Alphonso. The Polyporaceae of North America, XIII. The described species of *Bjerkandera*, *Trametes* and *Coriolus*. Bull. Torr. Bot. Club, 32:633-656. Dec. 1905.
- MURRILL, William A. *Tomophagus* for *Dendrophagus*. *Torrey*, 5:197. Nov. 1905.
- MYCOLOGICAL Bulletin [24 Nos.] Vol. 3, 1905. W. A. Kellerman. Columbus, Ohio.
- MYCOLOGICAL Flora of Cedar Point [list of 64 species]. W. A. Kellerman. Jour. Mycol. 10:114-6. May 1904.
- MYRIADOPORUS Peck, *syn. of Bjerkandera* q. v.
- MYRICA gale L., host to *Cronartium comptoniae* Arthur n. sp. Bull. Torr. Bot. Club, 33:29. Jan. 1906.
- NAEMOSPHAERA lactucicola Kellerm. n. sp., on old stems of *Lactuca virosa*. Jour. Mycol. 10:114. May 1904.
- NEW Chaetosphaera, A. A. P. Morgan. Jour. Mycol. 11:105. May 1905.
- NEW Egg Plant Fungus. [*Ascochyta lycopersici* Brun.] Clayton O. Smith. Jour. Mycol. 10:98-9. May 1904.
- NEW Fungi from Western New York. Charles E. Fairman. Jour. Mycol. 10:229-231. Sept. 1904.
- NEW Genera of Fungi published since the year 1900 with citation and original descriptions, (continued). Compiled by W. A. Kellerman and P. L. Ricker. Jour. Mycol. 10:232-250. Sept. 1904.
- NEW Hypholoma, A. [*H. pecosense*]. T. D. A. Cockerell. Jour. Mycol. 10:108. May 1904.
- NEW Melogramma [*M. patens*]. A. P. Morgan. Jour. Mycol. 10:49. Mar. 1904.
- NEW Mexico Fungi. [List of 46 species; Cockerell.] Jour. Mycol. 10:49-51. Mar. 1904.
- NEW Phyllachora from Mexico. J. B. Ellis and W. A. Kellerman. Jour. Mycol. 10:231-2. Sept. 1904.
- NEW Species from Various Localities, Notes on Fungi II. P. L. Ricker. Jour. Mycol. 11:111-5. May 1905.
- NEW Species (three) of Discomycetes. Elias J. Durand. Jour. Mycol. 10:99-101. May 1904.
- NEW Species of Fungi. Charles H. Peck. Bull. Torr. Bot. Club, 31:177-182. Apr. 1904.
- NEW Species of *Kalmusia* [*K. aspera*]. A. P. Morgan. Jour. Mycol. 11:153. July 1905.

- NEW Species of *Nectosphaera* [*N. lactucicola*]. W. A. Kellerman. Jour. Mycol. 10:113-4. May 1904.
- NEW Species of *Synchytrium* [*S. scirpi*]. J. J. Davis. Jour. Mycol. 11:154-6. July 1905.
- NEW Species of Uredineae; IV. Joseph Charles Arthur. Bull. Torr. Bot. Club, 33:27-34. Jan. 1906.
- NEW Species of Uredineae [Holway], *see North American Uredineae* . . . .
- NEW Uredineous Fungus [new genus], *see Bacodromus Holwayi* *Arth.*, *a New* . . . .
- NOMENCLATURE and Classifications [Erwin F. Smith], *see Bacteria Nomenclature and* . . . .
- NORTH American *Salvia*-Rusts. E. W. D. Holway. Jour. Mycol. 11:156-8. July 1905.
- NORTH American species of *Marasmius*, *see Marasmius* . . . .
- NORTH American Uredineae. [Several new species, etc.] E. W. D. Holway. Ann. Mycolog. 3:20-24. Feb. 1905.
- NOTES from Mycological Literature, IX. W. A. Kellerman. Jour. Mycol. 10:81-90. Mar. 1904.
- NOTES from Mycological Literature, X. Jour. Mycol. 10:156-8. May 1904.
- NOTES from Mycological Literature, XII. W. A. Kellerman. Jour. Mycol. 10:283-287. Sept. 1904.
- NOTES from Mycological Literature, XV. W. A. Kellerman. Jour. Mycol. 11:149-151. May 1905.
- NOTES from Mycological Literature, XVI. W. A. Kellerman. Jour. Mycol. 11:180-190. July 1905.
- NOTES from Mycological Literature, XVII. W. A. Kellerman. Jour. Mycol. 11:271-2. Nov. 1905.
- NOTES from Mycological Literature, XVIII. W. A. Kellerman. Jour. Mycol. 12:32-9. Jan. 1906.
- NOTES on Californian Uredineae and Descriptions of New Species. W. R. Dudley and C. H. Thompson. Jour. Mycol. 10:52-5. Mar. 1904.
- NOTES on Fungi II, with New Species from Various Localities. P. L. Ricker. Jour. Mycol. 11:111-5. May 1905.
- NOTES on Some North American *Phyllachoras*. Joseph F. Clevenger. Jour. Mycol. 159-164. Pr. 79. July 1905.
- NOTES on the Erysiphaceae of Washington. W. A. Lawrence. Jour. Mycol. 11:106-8. May 1905.
- NOTES on Uredineae, IV. E. W. D. Holway. Jour. Mycol. 11:268. Nov. 1905.

- NOTES on Uredineae, III. [*Puccinia atro-fusca* (Dudley & Thompson) Holway n. n.] E. W. D. Holway. Jour. Mycol. 10:228. Sept. 1904.
- NOVAE Fungorum species. H. et P. Sydow. [Nearly fifty species of which about a half dozen are North American.] Ann. Mycolog. 2:162-174. Mar. 1904.
- NUMMULARIA fuscella Rehm n. sp., ad lignum decorticatum Celtidis. Ann. Mycolog. 2:175. Mar. 1904.
- OHIO Fungi, Fascicle IX. [Labels.] Jour. Mycol. 10:55-62. Mar. 1904.
- OLIVE, Edgar W. The Morphology of *Monascus purpureus*. Bot. Gaz. 39:56-60. Jan. 1905.
- ?*OPHIODOTIS vorax* var. *atramentaria* Sacc. Syll., *syn. of Dothichloe atramentosa* q. v.
- OSMUNDA cinnamomea, host to *Uredinopsis osmudae* P. Magn. n. sp. Hedwigia, 43:123. 24 Mar. 1904.
- OXALIS stricta, host to *Sphaerulina oxalidis* Rehm n. sp. Ann. Mycolog. 2:177. Mar. 1904.
- PANAFOLUS *Epimyces* Peck, Host Plants of. Helen Sherman. Jour. Mycol. 11:167-9. Pl. 80. July 1905.
- PAROSELA domingensis (DC.) Heller (*Dalea domingensis* DC.), host to *Calliospora farlowii* Arthur n. sp. Bot. Gaz. 39:391. June 1905.
- PAXILLUS flavidus Berk., *syn. of Boletinus rhodoxanthus* q. v.
- PAXILLUS paradoxus Cooke, *syn. of Boletinus rhodoxanthus* q. v.
- PECK, Charles H. New Species of Fungi. Bull. Torr. Bot. Club, 31:177-182. Apr. 1904.
- PELLAEA andromedaeifolia (Kaulf.) Fée, host to *Hyalospora pellaeicola* Arthur n. sp. Bull. Torr. Bot. Club, 33:30. Jan. 1906.
- PELLAEA gracilis Hook., host to *Hyalospora pellaeicola* Arthur n. sp. Bull. Torr. Bot. Club, 33:30. Jan. 1906.
- PENNISETUM mexicanum, host to *Puccinia arthuri* Syn. n. sp. [Mexico.] Monogr. Uredin. 1:775. 15 Oct. 1905.
- PEZIZA fusicarpa Ger. and *Peziza semitosta* B. & C. Elias J. Durand. Jour. Mycol. 12:28-32. Jan. 1906.
- PEZIZA fusicarpa Ger., *syn. of Macropodia fusicarpa* q. v.
- PEZIZA hainesii Ell., *syn. of Macropodia semitosta* q. v.
- PEZIZA pubida B. & C., *syn. of Macropodia fusicarpa* q. v.
- PEZIZA pubida B. & C. [Note.] A. P. Morgan. Jour. Mycol. 11:154. July 1905.
- PEZIZA semitosta B. & C., *syn. of Macropodia semitosta* q. v.
- PEZIZA velutina B. & C., *syn. of Macropodia fusicarpa* q. v.



- PHACOSPHERIA lupini Syd. n. sp., in foliis vivis Lupini sparsiflori. Ann. Mycolog. 2:172. March 1904.
- PHAEOLOPSIS Murrill n. gen. Polyporaceae, type Polyporus verae-crucis Berk. Bull. Torr. Bot. Club, 32:489. Sept. 1905.
- PHAEOLOPSIS verae-crucis (Berk.) Murrill n. n. [Polyporus verae-crucis Berk.] Bull. Torr. Club, 32:491. Sept. 1905.
- PHIELLOPTERUS purpurascens, host to Puccinia traversiana Syd. n. sp. Monogr. Uredin. 1:889. 15 Oct. 1904.
- PHYLLACHORA adolphiae Ellis & Kellerm., on Adolphia infesta. [Mexico.] Jour. Mycol. 10:232. Sept. 1904.
- PHYLLACHORAS, Notes on Some, see Notes on . . . .
- PHYLLODONTIA magnusii Karst., syn. of *Cerreana unicolor* (Bull.) Murrill q. v.
- PHYLLOSTICTA amphipterygii Ricker n. sp., on Amphipterygium amphifolium Hemsl. & Rose. [Mexico.] Jour. Mycol. 11:111. May 1905.
- PHYLLOSTICTA lisianthi Syd n. sp., in foliis Lisianthi exsertis. Ann. Mycolog. 2:171. Mar. 1904.
- PITHECOLOBIUM dulce (Roxb.) Benth., host to Ravenelia pithecolobii Arthur n. sp. Bot. Gaz. 39:394. June 1905.
- PLATANUS leaves (dead), petioles and veins, host to Marasmius felix Morgan n. sp. Jour. Mycol. 12:2. Jan. 1906.
- PLEOSPORA atromaculans Rehm n. sp., ad ramulos emortuos Corni. Ann. Mycolog. 2:177. Mar. 1904.
- PLEOSPORA farlowiana Rehm n. sp., ad Selaginellam ruperstrem. Ann. Mycolog. 2:177. Mar. 1904.
- PODAXON strobilaceus Copeland n. sp., on a clay bank. Ann. Mycolog. 2:4. Jan. 1904.
- PODOCREA alutacea Lindau, syn. of *Podostroma alutacea* q. v.
- PODOSPHAERA tridactyla, see *Minor Mycological Notes*, III . . . .
- PODOSTROMA alutacea (Pers.) Atkinson n. n. [Clavaria simplex Schmiedel p. p., Sphaeria alutacea Pers., Sph. clavata Bowerby, Sph. alutacea b Sphaeria albicans Pers., Sph. alutacea b turgida Fr., Cordyceps alutacea Link., Hypocrea alutacea Tul., ?Podostroma leucopus Karsten, Podocrea alutacea Lindau, Hypocrea lloydii Bresadola.] Bot. Gaz. 40:416. Dec. 1905.
- ?PODOSTROMA leucopus Karsten, syn. of *Podostroma alutacea* q. v.
- POINCIANA pulcherrima L. (Caesalpinia pulcherrima Sw.), host to Ravenelia pulcherrima Arthur n. sp. Bot. Gaz. 39:395. June 1905.
- POLYPORUS fractipes B. & C., syn. of *Grifolia fractipes* q. v.

POLYPORACEAE of North America, X. *Agaricus*, *Lenzites*, *Cerrena* and *Favolus*. William Alphonso Murrill. Bull. Torr. Bot. Club, 32:83-103. Feb. 1905.

POLYPORACEAE of temperate America, A key to the brown sessile. William Alphonso Murrill. Torreya, 5:194-5. Nov. 1905.

POLYPORACEAE of North America, XIII. The described species of *Bjerkandera*, *Trametes* and *Coriolus*. William Alphonso Murrill. Bull. Torr. Bot. Club, 32:633-656. Dec. 1905.

POLYPORUS *aesculi* Fr., *syn. of Agaricus aesculi* q. v.

POLYPORUS *albo-cervinus* Berk., *syn. of Coriolus brachypus* q. v.

POLYPORUS *arenicolor* B. & C., *syn. of Coriolus arenicolor* q. v.

POLYPORUS *auberianus* Mont., *syn. of Fomes auberianus* q. v.

POLYPORUS *aurantiacus* Peck, *syn. of Pycnoporellus fibrillosus* q. v.

POLYPORUS *brachypus* Lév., *syn. of Coriolus brachypus* q. v.

POLYPORUS *fragrans* Peck, *syn. of Bjerkandera fragrans* q. v.

POLYPORUS *fibrillosus* Karst., *syn. of Pycnoporellus fibrillosus* q. v.

POLYPORUS *flabellum* Mont., *syn. of Polyporus xabellum* q. v.

POLYPORUS *hirsutus* Fr., *syn. of Coriolus nigromarginatus* q. v.

POLYPORUS *hirsutululus* Schw., *syn. of Coriolus hirsutululus* q. v. . .

POLYPORUS *ilicincola* B. & C., *syn. of Coriolus ilicincola* q. v.

POLYPORUS *latissimus* Fr., *syn. of Agaricus quercinus* q. v.

POLYPORUS *obtusulus* Berk., *syn. of Trametes unicolor* q. v.

POLYPORUS *planus* Peck, *syn. of Coriolus planellus* q. v.

POLYPORUS *polygrammus* Mont., *syn. of Favolus tenuis* q. v.

POLYPORUS *pubescens* Fr., *syn. of Coriolus pubescens* q. v.

POLYPORUS *sartwellii* B. & C., *syn. of Coriolus sartwellii* q. v.

POLYPORUS *sericeo-hirsutus* Kl., *syn. of Coriolus sericeohirsutus* q. v.

POLYPORUS *sobrius* B. & C., *syn. of Coriolus sobrius* q. v.

POLYPORUS *subluteus* Ell. & Ev., *syn. of Coriolus subluteus* q. v.

POLYPORUS *sullivantii* Mont., *syn. of Coriolus sullivantii* q. v.

POLYPORUS *tener* Lév., *syn. of Coriolus tener* q. v.

POLYPORUS *unicolor* Fr., *syn. of Trametes unicolor* q. v.

POLYPORUS *verae-crucis* Berk., *syn. of Phaeolopsis verae-crucis* q. v.

POLYSTICTUS *barbatulus* Fr., *syn. of Coriolus sericeohirsutus* q. v.

POLYSTICTUS *hirtellus* Fr., *syn. of Corilus hirtellus* q. v.

POLYSTIGMA *pusillum* Syd. n. sp., in foliis vivis *Andirae excelsae*. [Quatemala.] Ann. Mycolog. 2:167. Mar. 1904.

- PSATHYRA multipedata Peck n. sp., grassy ground. Bull. Torr. Bot. Club, 32:80. Feb. 1905.
- PTERIS aquilina lanuginosa, host to Gloeosporium obtogens Syd. n. sp. Ann. Mycolog. 2:172. Mar. 1904.
- PYCNOPORELLUS fibrillosus (Karst.) Murrill n. n. [Polyporus fibrillosus Karst., P. aurantiacus Peck, Inonotus fibrillosus Karst.] Bull. Torr. Bot. Club, 32:489. Sept. 1905.
- Puccinia actinomeridis Magnus, [not on Actinomeris squarrosa as reported but on Verbesina occidentalis], a synonym of Puccinia verbesinae Schw. [Ricker.] Jour. Mycol. 11:113. May 1905.
- Puccinia aequinoctialis Holway n. sp., on Bigonia aequinoctialis L. [Cuba.] Ann. Mycolog. 3:22. Feb. 1905.
- Puccinia albiperidia Arth. [Cultures on Ribes uva-crispa. Klebahn.] Jour. Mycol. 12:14. Jan. 1906.
- Puccinia albiperidia Arth. [Cultures on Ribes gracilis. Arthur.] Jour. Mycol. 12:14. Jan. 1906.
- Puccinia ambicola E. & E., synonym of P. plumbaria Peck. [Holway.] Jour. Mycol. 11:268. Nov. 1905.
- Puccinia amphigena Diet. [Cultures on Smilax hispida. Arthur.] Jour. Mycol. 12:16. Jan. 1906.
- Puccinia anachoreta Hark. [Notes and description including the uredo. Dudley and Thompson.] Jour. Mycol. 10:52. Mar. 1904.
- Puccinia arthuri Syd. n. sp., in foliis vivis Penniseti mexican. [Mexico.] Monogr. Uredin. 1:775. 15 Oct. 1904.
- Puccinia atro-fusca (Dudley & Thompson) Holway n. n. [Uromyces atro-fusca Dudley & Thompson.] Jour. Mycol. 10:228. Sept. 1904.
- Puccinia badia Holway n. sp., on Salvia albicana Fernald, S. chrysantha Mart. & Gal., and Salvia sp. [Mexico.] Jour. Mycol. 11:158. July 1905.
- Puccinia boutelouae (Jennings) Holway. [Diorchidium boutelouae Jennings, Bull. Tex. Agr. Sta. 9:25. 1890.] [Description and notes. Holway.] Ann. Mycolog. 3:20. Feb. 1905.
- Puccinia buchloes Syd. Mon. Ured. non Schofield, syn. of Puccinia kansensis q. v.
- Puccinia canaliculata (Schw.) Lagerh. [Cultures on Cyperus esculentus. Arthur.] Jour. Mycol. 12:23. Jan. 1906.
- Puccinia caricis-solidaginis Arth. [Cultures on Solidago canadensis. Arthur.] Jour. Mycol. 12:15. Jan. 1906.
- Puccinia caricis (Schum.) Reb. [Cultures on Urtica gracilis. Arthur.] Jour. Mycol. 12:15. Jan. 1906.

- PUCCINIA distichlidis* E. & E., *syn. of P. kelseyi* q. v.
- PUCCINIA distorta* Holway n. sp., on *Mesosphaerum pectinatum* (L.) Kunze, and *Mesosphaerum* sp. *Ann. Mycol.* 3:22. Feb. 1905.
- PUCCINIA dolochi* Arthur n. sp., on *Dolichos reticulatus* Hockst., Aguacate. [Cuba.] *Bull. Torr. Bot. Club*, 33:28. Jan. 1906.
- PUCCINIA eleocharidis* Arth. [Cultures on *Eupatorium perfoliatum*. Arthur.] *Jour. Mycol.* 12:23. Jan. 1906.
- PUCCINIA exasperans* Holway n. sp., on *Bouteloua* (*Atheropogon*) *curtipendulus* (Mx.) and *B. pringlei* Scrib. [Mexico.] *Ann. Mycol.* 3:21. Feb. 1905.
- PUCCINIA fimbristylidis* Arthur n. sp., on *Fimbristylis polymorpha* Breckl., *F. holwayana* Fernald, and *Fimbristylis* sp. [Mexico.] *Bull. Torr. Bot. Club*, 33:28. Jan. 1906.
- PUCCINIA fragilis* Tracy & Gall. [In Baker, Tracy & Earle, *Plants of So. Cal.* 423 a are *P. plumbaria* Peck on *Phlox* (*P. longifolia*?). Holway.] *Jour. Mycol.* 11:268. Nov. 1905.
- PUCCINIA fraxianta* (Schw.) Arth. [Cultures on *Fraxinus lanceolata*. Arthur.] *Jour. Mycol.* 12:16. Jan. 1906.
- PUCCINIA fumosa* Holway n. sp., on *Loeselia coccinea* Don., *L. glandulosa*, and *L. ciliata*. [Mexico.] *Ann. Mycol.* 3:23. Feb. 1905.
- PUCCINIA gouaniae* Holway n. sp., on *Gouania tomentosa* Jacq. [Cuba.] *Ann. Mycol.* 3:21. Feb. 1905.
- PUCCINIA grindeliae* Pk. [Cultures on *Gutierrezia sarothrae*. Arthur.] *Jour. Mycol.* 12:21. Jan. 1906.
- PUCCINIA guillemineae* Diet. et Holw. [type had only teleutospores, collected in Mexico with uredo and aecidia; description. Holway.] *Ann. Mycol.* 3:22. Feb. 1905.
- PUCCINIA helianthi* Schw. [Cultures on *Helianthus annuus* and *H. grosse-serratus*. Arthur.] *Jour. Mycol.* 12:18. Jan. 1906.
- PUCCINIA infrequens* Holway n. sp., on *Salvia cinnabarina* Mart. & Gal. [Mexico.] *Jour. Mycol.* 11:158. July 1905.
- PUCCINIA kansensis* Ell. & Barthol. *Eryth.* 4:1. [*P. buchloes* Syd. *Monogr. Ured.* 1:740 non *P. buchloes* Schofield, Webber, *App. Fl. Nebr.*] *Ann. Mycol.* 3:20. Feb. 1905.
- PUCCINIA kelseyi* Syd. n. n. [*P. distichlidis* E. & E.] In *foliis vivis Spartinae gracilis, cynosuroidis*. *Monogr. Uredin.* 1:806. 15 Oct. 1904.
- PUCCINIA kraegeri* Ricker n. sp., on leaves of *Festuca subulata* Trin. (*F. jonesii* Vasey). *Jour. Mycol.* 11:114. May 1905.
- PUCCINIA kuhniae* Schw. [Cultures on *Kuhnia eupatorioides*. Arthur.] *Jour. Mycol.* 12:23. Jan. 1906.



- PUCCINIA lateripes B. & Br. [Cultures on Ruellia ciliosa and R. strepens. Arthur.] Jour. Mycol. 12:18. Jan. 1906.
- PUCCINIA leptospora Ricker n. sp., on Trisetum virletii Fourn. [Mexico.] Jour. Mycol. 11:114. May 1905.
- PUCCINIA luxuriosa Syd. n. sp. [P. tosta var. luxurians Arth.] In foliis vivis Sporobolus airoidis. Monogr. Uredin. 1:812. 15 Oct. 1904.
- PUCCINIA micromeriae Dudley & Thompson n. sp., on Micromeria chamissonis. Jour. Mycol. 10:54. Mar. 1904.
- PUCCINIA monardellae Dudley & Thompson n. sp., on Monardella villosa, M. undulata; distributed under Puccinia menthae Pers. F. Columb. No. 1886.] Jour. Mycol. 10:53. Mar. 1904.
- PUCCINIA moreniana Dudley and Thompson n. sp., on Brodiaea capitata. Jour. Mycol. 10:53. Mar. 1904.
- PUCCINIA nivea Holway n. sp., on Salvia purpurea Cav. [Mexico.] Jour. Mycol. 11:158. July 1905.
- PUCCINIA nodosa Ell. & Hark. [Description; aecidia and uredo not before reported on Brodiaea capitata. Dudley & Thompson.] Jour. Mycol. 10:52. Mar. 1904.
- PUCCINIA oblicus B. & C., synonym of P. lateritia B. & C. [Holway.] Jour. Mycol. 11:268. Nov. 1905.
- PUCCINIA pammelii (Trel.) Arth. [Cultures on Euphorbia corollata. Arthur.] Jour. Mycol. 12:16. Jan. 1906.
- PUCCINIA paradoxica Ricker n. sp., on Melica smithii (Porter) Vasey. Jour. Mycol. 11:114. May 1905.
- PUCCINIA pattersoniae Syd. n. sp., on foliis vaginisque Tripsaci dactyloidis. Monogr. Uredin. 1:820. 15 Oct. 1904.
- PUCCINIA pattersoniana Arthur n. sp., on Agropyron spicatum (Pursh.) Rydb. Bull. Torr. Bot. Club, 33:29. Jan. 1906.
- PUCCINIA peckii (DeT.) Kellerm. [Cultures on Onagra biennis. Arthur.] Jour. Mycol. 12:15. Jan. 1906.
- PUCCINIA piperi Ricker n. sp., on Festuca pacifica Piper ined. Jour. Mycol. 11:114. May 1905.
- PUCCINIA poculiformis (Jacq.) Wettst. [Cultures on Berberis vulgaris. Arthur.] Jour. Mycol. 12:17. Jan. 1906.
- PUCCINIA polygoni-amphibii Pers. [Cultures on Geranium maculatum. Arthur.] Jour. Mycol. 12:18. Jan. 1906.
- PUCCINIA pruni-spinosae Pers. [Cultures with aecidiospores (Aecidium hepaticatum Schw.) on Prunus serotina. Arthur.] Jour. Mycol. 12:18. Jan. 1906.
- PUCCINIA purpusii P. Henn. [Reported on Arabis, is P. plumbaria Pk., on some Phlox or closely allied genus. Holway.] Jour. Mycol. 11:268. Nov. 1905.

- PUCCINIA pustulata* (Curt.) Arthur. [Cultures on *Comandra umbellata*. Arthur.] Jour. Mycol. 12:16. Jan. 1906.
- PUCCINIA rubricans* Holway, syn of *Puccinia sanguinolenta* P. Henn. [Holway.] Ann. Mycolog. 3:24. Feb. 1905.
- PUCCINIA sambuci* (Schw.) Arth. [Cultures on *Sambucus canadensis*. Arthur.] Jour. Mycol. 12:14. Jan. 1906.
- PUCCINIA sanguinolenta* P. Henn. [host said to be of Myrtaceae, S. Am.; syn.: *Puccinia rubricana* Holway, host one of Malpighiaceae, Heteropteris. Host of former is a Heteroptis. Holway.] Ann. Mycolog. 3:24. Feb. 1905.
- PUCCINIA scandica* Johans. [alpine regions of Sweden, now collected in Utah, alt. 8,900 ft., on *Epilobium alpinum*, and in Washington on *E. clavatum*. Holway.] Ann. Mycolog. 3:23. Feb. 1905.
- PUCCINIA seymouriana* Arth. [Cultures on *Cephalanthus occidentalis*. Arthur.] Jour. Mycol. 12:24. Jan. 1906.
- PUCCINIA silphii* Schw. [Cultures on *Silphium integrifolium*. Arthur.] Jour. Mycol. 12:21. Jan. 1906.
- PUCCINIA solidaginis* Pk. [Cultures on *Solidago canadensis*. Arthur.] Jour. Mycol. 12:22. Jan. 1906.
- PUCCINIA sorghi*. [Cultures on *Oxalis*. Kellerman.] Jour. Mycol. 12:10. Jan. 1906.
- PUCCINIA sorghi*, culture experiments, 1905, [Kellerman], see *Uredineous* . . . . .
- PUCCINI sorghi* Schw. [Cultures on *Oxalis cymosa*. Arthur.] Jour. Mycol. 12:17. Jan. 1906.
- PUCCINIA subnitens* Diet. [Cultures on *Erysimum asperum*, *Sophia incisa*, *Lepidium virginicum*, and *Bursa bursa-pastoris*. Arthur.] Jour. Mycol. 12:17. Jan. 1906.
- PUCCINIA substerilis* E. & E. [Cultures of amphispores on *Stipa viridula*, failure of teleutospores on *Aster ericoides*, *A. multiflorus*, and *A. novae-angliae*, hence this rust not the same as *P. stipae*. Arthur.] Jour. Mycol. 12:24. Jan. 1906.
- PUCCINIA tosta* var. *luxurians* Arth., syn. of *P. luxuriosa* q. v.
- PUCCINIA transformans* E. & E. [Cultures on *Stenolobium stans* (*Tecoma stans*). Arthur.] Jour. Mycol. 12:22. Jan. 1906.
- PUCCINIA traversiana* Syd. n. sp., in foliis vivis *Phellopteri purpurascantis*. Mongr. Uredin. 1:889. 15 Oct. 1904.
- PUCCINIA uniformis* Pammel & Hume, synonym of *P. bistortae* (Sta.) DC. [Holway.] Jour. Mycol. 11:268. Nov. 1905.
- PUCCINIA verbenicola* (E. & K.) Arth. [Cultures on *Verbena urticaefolia*. Arthur.] Jour. Mycol. 12:16. Jan. 1906.
- PUCCINIA xanthii* Schw. [Cultures on *Xanthium canadense*. Arthur.] Jour. Mycol. 12:20. Jan. 1906.

- PYRENOMYCETES of Orleans County, N. Y. Charles Fairman. Proc. Rochester Acad. Sci. 4:165-191. 2 Sept. 1905.
- PYRENOMYCETES scarcely known in North America. [Notes on a few species.] A. P. Morgan. Jour. Mycol. 10:226. Sept. 1904.
- PYRENOPEZIZA cephalanthi Fairman n. sp., on dead limbs of *Cephalanthus occidentalis*. Jour. Mycol. 10:229. Sept. 1904.
- QUERCUS, bark, host to *Clypeosphaeria pseudobufonia* Rehm. n. sp. Ann. Mycolog. 2:176. Mar. 1904.
- QUERCUS, wood, host to *Nylaria* (*Nylodactyla*) *longiana* Rehm n. sp. Ann. Mycolog. 2:175. Mar. 1904.
- QUERCUS *densiflora*, host to *Marasmius copelandi* Peck n. sp. Bull. Torr. Bot. Club 31:182. Apr. 1904.
- RAVENELIA *gracilis* Arthur n. sp., on an undetermined species of *Mimosaceae*, Mexico. Bot. Gaz. 39:393. June 1905.
- RAVENELIA *inconspicua* Arthur n. sp., on *Cassia* (or *Caesalpinia*) sp., Mexico. Bot. Gaz. 39:395. June 1905.
- RAVENELIA *lysilomae* Arthur n. sp., on *Lysiloma tergemina* Benth., Mexico. Bot. Gaz. 39:392. June 1905.
- RAVENELIA *pithecolobii* Arthur n. sp., on *Pithecolobium dulce* Roxb.) Benth., Mexico. Bot. Gaz. 39:394. June 1905.
- RAVENELIA *pulcherrima* Arthur n. sp., on *Poinciana pulcherrima* L. (*Caesalpinia pulcherrima* Sw.), Mexico. Bot. Gaz. 39:395. June 1905.
- RED cedar, host to *Agaricus juniperus* Murrill n. sp. Bull. Torr. Bot. Club, 32:85. Feb. 1905.
- REHM, H. *Ascomycetes Americae borealis*. Ann. Mycolog. 2:175-8. 1904.
- REMARKABLE occurrence of *Morchella esculenta* (L.) Pers. W. C. Sturgis. Jour. Mycol. 11:269. Nov. 1905.
- REVIEW of: Jaczewski, A. A. Yearbook of Information concerning Diseases and Injuries of Cultivated and Wild Economic Plants. First Year. 1903. pp. 166. St. Petersburg, 1904. Russian. Ernst A. Bessey. Jour. Mycolog. 11:170-9. July 1905.
- RHODOSPORAE, Rosy-spored Agarics. [The genus *Clitopilus*.] H. C. Beardslee. Jour. Mycol. 11:109-110. Pl. 76-77. May 1905.
- RHYNCHIOSIA *texana* T. & G., *see Dolicholus texanus* . . .
- RHYNCHIOSTOMA *americanum* (E. & E.) Morgan n. n. [R. *cornigerum* Karst. var. *americana* (E. & E.).] Jour. Mycol. 10:227. Sept. 1904.
- RHYNCHIOSTOMA *cornigerum* Karst. var. *americana* E. & E., *syn. of Rhynchostoma americanum* q. v.

- RICKER, P. L. Notes on Fungi II, with New Species from Various Localities. *Jour. Mycol.* 11:111-5. May 1905.
- ROSTOVTSSEV, S. I. Contributions to the knowledge of the False Mildews (Peronosporaceae). [Review. Ernst A. Bessey.] *Jour. Mycol.* 11:270-1. Nov. 1905.
- ROSY-SPORED Agarics or Rhodosporeae. [The genus *Clitopilus*.] H. C. Beardslee. *Jour. Mycol.* 11:109-110. Pl. 76-77. May 1905.
- RUSSULA luteobasis Peck n. sp. *Bull. Torr. Bot. Club*, 31:179. Apr. 1904.
- RUSTS, Leguminous, from Mexico. J. C. Arthur. *Bot. Gaz.* 39:385-396. June 1905.
- RUST Notes for 1904. J. M. Bates. *Jour. Mycol.* 11:116. May 1905.
- RUSTS, Sexual Reproduction in. A. H. Christman. *Bot. Gaz.* 39:267-275. Pl. VIII. April 1905.
- SACCARDO; de Diagnostica et nomenclatura mycologica; Admonita quaedam. Translated by Frederic E. Clements. *Jour. Mycol.* 10:109-112. May 1904.
- SAGGIO di una monografia del genere *Triphragmium*. M. Milesi e. G. B. Traverso. *Ann. Mycolog.* 2:143-156. Mar. 1904.
- SALVIA albicans Fernald, host to *Puccinia badia* Holway n. sp. *Jour. Mycol.* 11:158. July 1905.
- SALVIA chrysantha Mart. & Gal., host to *Puccinia badia* Holway n. sp. *Jour. Mycol.* 11:158. July 1905.
- SALVIA cinnabarina Mart. & Gal., host to *Puccinia infrequens* Holway n. sp. [Mexico.] *Jour. Mycol.* 11:158. July 1905.
- SALVIA purpurea Cav., host to *Puccinia nivea* Holway n. sp. *Jour. Mycol.* 11:158. July 1905.
- SALVIA Rusts, *see North American Salvia Rusts* . . . .
- SALVIA sp., host to *Puccinia badia* Holway n. sp. *Jour. Mycol.* 11:158. July 1905.
- SAPROLEGNIALES, Fertilization in. A. H. Trow. *Bot. Gaz.* 39:300. April 1905.
- SAPROLEGNIALES, Fertilization in. B. M. Davis. *Bot. Gaz.* 39:61-4. Jan. 1905.
- SARCOSCYPHA pubida B. & C., *syn. of Macropodia fusicarpa* q. v.
- SARCOSCYPHA semitosta B. & C., *syn. of Macropodia semitosta* q. v.
- SCIRPUS atrovirens Mühl., host to *Synchytrium scirpi* Davis n. sp. *Jour. Mycol.* 11:156. July 1905.
- SELAGINELLA rupestris, host to *Pleospora farlowiana* Rehm n. sp. *Ann. Mycolog.* 2:177. Mar. 1904.



- SEPTORIA albo-maculans Syd. n. sp., in foliis vivis Eupatorii nubi-  
geni. [Guatemala]. Ann. Mycolog. 2:171. Mar. 1904.
- SEPTORIA mirabilis Peck, *syn. of Uredinopsis mirabilis q. v.*
- SEXUAL Reproduction in the Rusts. A. H. Christman. Bot.  
Gaz. 39:267-275. Pl. VIII. April 1905.
- SPHAERIA alutacea Pers., *syn. of Podostroma alutacea q. v.*
- SHERMAN, Helen. The Host Plants of Panaeolus Epimyces Peck.  
Jour. Mycol. 11:167-9. July 1905.
- SIEGLINGIA purpurea (Welt.) Kunze, host to Ustilago sieglingiae  
Ricker n. sp. Jour. Mycol. 11:112. May 1905.
- SISTOTREMA cinereum Pers., *syn. of Cerrena unicolor (Bull.)  
Murrill q. v.*
- SMITH, Clayton O. A New Egg Plant Fungus [Ascochyta lyco-  
persici Brun.] Jour. Mycol. 10:98-9. May 1904.
- SPARTINA cynosuroides, host to Puccinia kelseyi Syd. n. n.  
Monogr. Uredin. 1:806. 15 Oct. 1904.
- SPARTINA gracilis, host to Puccinia kelseyi Syd. n. n. Monogr.  
Uredin. 1:806. 15 Oct. 1904.
- SPHAERIA clavata Sowerby, *syn. of Podostroma alutacea q. v.*
- SPHAERIA alutacea b Sph. albicans Pers., *syn. of Podostroma  
alutacea q. v.*
- SPHAERIA alutacea b turgida Fr., *syn. of Podostroma alutacea  
q. v.*
- SPHAEROPSIS hamamelidis Fl. Tassi n. sp., in cortice Hamame-  
lidis virginicae: Bull. Lab. ed Orto Bot. 6:126. 1904.
- SPHAEROPSIS thalictri Ellis & Fairm, n. sp., on dead stems of  
Thalictrum sp. Jour. Mycol. 10:229. Sept. 1904.
- Discard *Spaeropsora durandi* Rehm. n. sp., and substitute:
- SPHAEROSPORA durandi Rehm n. sp., ad humum. Ann. Mycolog.  
2:36. Jan. 1904.
- SPHAERULINA oxalidis Rehm n. sp., ad caules emortuos Oxalidis  
strictae. Ann. Mycolog. 2:177. Mar. 1904.
- SPOROBOLIS airoides, host to Puccinia luxuriosa Syd. n. sp.  
Monogr. Uredin. 1:812. 15 Oct. 1904.
- SPORE-structures, Terminology, *see Terminology of*. . .
- STRIGLIA Adams., [Murrill], *syn. of Agaricus (Dill.) L.* Bull.  
Torr. Bot. Club, 32:83. Feb. 1905.
- STROPHARIA schraderi Peck n. sp., sandy grassy soil about stumps.  
Bull. Torr. Bot. Club, 32:80. Feb. 1905.
- STURGIS, W. C. Remarkable occurrence of Morchella esculenta  
(L.) Pers. Jour. Mycol. 11:269. Nov. 1905.
- SUGGESTIONS from the study of Dairy Fungi. Charles Thom.  
[Plan for obtaining more definite knowledge of the forms.]  
Jour. Mycol. 11:177-124. May 1905.

- SUMSTINE, D. R. Gomphidius Rhodoxanthus Once More. [Note and synonymy] Jour. Mycol. 11:165-166. July 1905.
- SUMSTINE, D. R. Another Fly Agaric. [Amanita olitoria Bull.] Jour. Mycol. 11:267. Nov. 1905.
- SYDOW, H. et P. Novae Fungorum species. [Nearly fifty species of which about half a dozen are North American.] Ann. Mycolog. 2:162-174. Mar. 1904.
- SYMBIOSIS in the genus Lolium. E. M. Freeman. Minn. Bot. Studies, 3:329-334. 18 Oct. 1904.
- SYNCHYTRIUM A New Species of [S. scripi.] J. J. Davis. Jour. Mycol. 11:154-6. July 1905.
- SYNCHYTRIUM scirpi Davis n. sp., on leaves of Scirpus atrovirens Mühl. Jour. Mycol. 11:156. July 1905.
- TERMINOLOGY of the spore-structures in the Uredinales. J. C. Arthur. Bot. Gaz. 39:219-222. March 1905.
- TESTICULARIA leersiae Cornu, syn. of *Tolyposporium globuliferum* q. v.
- THALICTRUM sp., dead stems, host to *Sophaeropsis thalictri* Ellis & Fairm. Jour. Mycol. 10:229. Sept. 1904.
- THAXTER, Roland. A new American species of *Wynnea*. Bot. Gaz. 39:241-7. Pl. IV-V. April 1905.
- THECAPHORA globulifera B. & Br., syn. of *Tolyposporium globuliferum* q. v.
- THOM, Charles. Some Suggestions from the study of Dairy Fungi. [Plan for obtaining more definite knowledge of the forms.] Jour. Mycol. 11:177-124. May 1905.
- THOMPSON, C. H. and Dudley, W. R., see Dudley, W. R. and . .
- THOUINIA acuminata, host to *Melasmia thouinia* Syd. n. sp. [Mexico]. Ann. Mycolog. 2:171. Mar. 1904.
- TILIA americana, wood, host to *Lasiosphaeria ovina aureliana* Fairman n. var. Jour. Mycol. 10:230. Sept. 1904.
- TILLETIA eragostidis Clinton & Ricker n. sp., on *Eragrostis glomerata* (Walt.) Dewey. Jour. Mycol. 11:111. May 1905.
- TOLYPOSPORIUM globuliferum (B. & Br.) Ricker n. n. [Thecaphora globulifera B. & Br., *Testicularia leersiae* Cornu, *Ustilago leersiae* Durieu.] Jour. Mycol. 11:112. May 1905.
- TOMOPHAGUS Murrill n. n. [*Dendrophagus* Murrill]. Torrey, 5:197. Nov. 1905.
- TOMOPHAGUS for *Dendrophagus*. William A. Murrill. Torrey, 5:197. Nov. 1905.
- TOMOPHAGUS colossus (Fr.) Murrill n. n. [*Dendrophagus colossus* (Fr.) Murrill]. Torrey, 5:197. Nov. 1905.
- TRAMETES, see *Polyporaceae of North America, XIII. The described species of* . . .

- TRAMETES ambigua Fr., *syn. of Agaricus aesculi* q. v.
- TRAMETES berkeleyi Cooke, *syn. of Agaricus aesculi* q. v.
- TRAMETES centralis Fr., *syn. of Agaricus deplanatus* q. v.
- TRAMETES elegans Fr., *syn. of Agaricus deplanatus* q. v.
- TRAMETES incana Berk., *syn. of Agaricus aesculi* q. v.
- TRAMETES lactea Fr., *syn. of Agaricus aesculi* q. v.
- TRAMETES rubescens Fr., *syn. of Agaricus confragosus* (Bolt.) Murrill q. v.
- TRAMETES, synopsis [key] of the North American species. [Murrill]. Bull. Torr. Bot. Club, 32:637. Dec. 1905.
- TRAMETES unicolor (Schw.) Murrill n. n. [Boletus unicolor Schw., Polyporus unicolor Fr., P. obtusus Berk.] Bull. Torr. Bot. Club, 32:638. Dec. 1905.
- TRICHOLOMA viscosum Peck. n. sp. Bull. Torr. Bot. Club, 31:177. Apr. 1904.
- TRIOSTEUM angustifolium L., host to Aecidium triostei Arthur n. sp. Bull. Torr. Bot. Club, 33:32. Jan. 1906.
- TRIPHHRAGMIUM [monograph, Milesi e Traverso], *see Saggio di* . . . .
- TRIPSACUS dactyloides, host to Puccinia pattersoniae. Monogr. Uredin. 1:820. 15 Oct. 1904.
- TRISSETUM virletii Fourn., host to Puccinia leptospora Ricker n. sp. Jour. Mycol. 11:114. May 19 1905.
- TROW, A. H. Fertilization in the Saprolegniales. Bot. Gaz. 39:300. April 1905.
- TUBERCULARIA fasciculata Tode. [Note]. A. P. Morgan. Jour. Mycol. 10:97-8. May 1904.
- Two New Haplosporellas. J. B. Ellis and E. Bartholomew. Jour. Mycol. 11:108. May 1905.
- UNCINULA parvula [note], *see Minor Mycological Notes, IV.* . .
- UREDINEAE Californian [Dudley and Thompson], *see Notes on* . . . .
- UREDINEAE, cultures of in 1905, [Arthur], *see Cultures* . . .
- UREDINEAE, New Species [Holway], *see North American Uredineae* . . . .
- UREDINEAE, New Species of. IV. Joseph Charles Arthur. Bull. Torr. Bot. Club, 33:27-34. Jan. 1906.
- UREDINEAE, Notes on. III. E. W. D. Holway. Jour. Mycol. 10:228. Sept. 1904.
- UREDINEAE, Notes on. IV. E. W. D. Holway. Jour. Mycol. 11:268. Nov. 1905.
- UREDINEOUS culture experiments with Puccinia sorghi. [4th An. Report]. W. A. Kellerman. Jour. Mycol. 12:9-11. Jan. 1906.

- UREDINOPSIS americana Syd., a synonym of *U. mirabilis* (Peck) P. Magn. [Magnus] *Hedwigia*, 43:122. 24 Mar. 1904.
- UREDINOPSIS atkinsonii P. Magn. n. sp., on *Aspidium thelypteris*. *Hedwigia*, 43:123. 24 Mar. 1904.
- UREDINOPSIS mirabilis (Peck) Magnus n. n. [*Septoria mirabilis* Pk.] *Hedwigia*, 43:21. 24 Mar. 1904.
- UREDINOPSIS osmundae P. Magn. n. sp., on *Osmunda cinnamomea*. *Hedwigia*, 43:123. 24 Mar. 1904.
- UREDIO aeschynomenis Arthur n. sp., on *Aeschynomene americana* L., Merico. *Bot. Gaz.* 39:392. June 1905.
- UREDIO dichromenae Arthur n. sp., on *Dichromena ciliata* Vahl., and *D. radicans* Cham. & Schl. [Porto Rico]. *Bull. Torr. Bot. Club*, 33:31. Jan. 1906.
- UROMYCES acuminatus Arth. [Cultures on *Steironema ciliatum*. Arthur]. *Jour. Mycol.* 12:24. Jan. 1906.
- UROMYCES atro-fusca Dudley & Thompson, *syn. of Puccinia atro-fusca* q. v.
- UROMYCES bauhinicola Arthur n. sp., on *Bauhinia pringlei* Wats., and *Bauhinia* sp., Mexico. *Bot. Gaz.* 39:389. June 1905.
- UROMYCES caricis Peck [is the amphisporic form of *Puccinia caricis* (Schum.) Reb. Arthur]. *Jour. Mycol.* 12:15. Jan. 1906.
- UROMYCES clingyi Pat. & Har., on *Andropogon schottii* Rupr., *A. hirtiflorus* Kth., and *A. liebmannii* Hack. [New description. Rickr.] *Jour. Mycol.* 11:115. May 1905.
- UROMYCES clitorae Arthur n. sp., on *Clitoria mexicana* Link., Mexico. *Bot. Gaz.* 39:389. June 1905.
- UROMYCES cologaniae Arthur n. sp., on *Cologania pulchella* H. B. K., *C. congesta* Rose, *Cologania* sp., Mexico. *Bot. Gaz.* 39:387. June 1905.
- UROMYCES dolicholi Arthur n. sp., on *Dolicholus Texanus* (T. & G.) Vail (*Rhynchosia texana* T. & G.) *Bull. Torr. Club*, 33:27. Jan. 1906.
- UROMYCES gentianae Arth. [type locality Decorah Iowa, on *Gentiana quinquefolia occidentalis* Hitchcock; collected in Mexico, on *Gentiana acuta* Mx., alt. 10000 ft., also on *Gentiana* Englm. in Colorado. Holway]. *An. Mycolog.* 3:22. Feb. 1905.
- UROMYCES hyperici (Schw.) Cart. [collected in Mexico on *Hypericum* sp. Holway]. *Ann. Mycolog.* 3:22. Feb. 1905.
- UROMYCES montanus Arthur n. sp., on *Lupinus mexicanus* H. B. K., Mexico. *Bot. Gaz.* 39:386. June 1905.
- UROMYCES oblonga Vize. [On *Trifolium*, not on "Burr Clover;" identical with *U. minor* Schroeter. Holway]. *Jour. Mycol.* 11:268. Nov. 1905.



- UROMYCES rugosa Arthur n. sp., on Lupinus sp., Mexico. Bot. Gaz. 39:386. June 1905.
- UROMYCES speciosus Holway n. sp., on Frasera macrophylla Greene. Ann. Mycolog. 3:23. Feb. 1905.
- USTILAGINOIDEA strumosa (Cke.) Clint. n. n. [Ustilago strumosa Cke.] Jour. Mycol. 11:112. May 1905.
- USTILAGO leersiae Durieu, *syn. of Tolyposporium globuliferum* q. v.
- USTILAGO sieglingiae Ricker n. sp., on Sieglingia purpurea (Walt.) Kunze. Jour. Mycol. 11:112. May 1905.
- USTILAGO strumosa Cke., *syn. of Ustiloginoidea strumosa* q. v. Proc. Rochester Acad. Sci. 4:189. 2 Sept. 1905.
- VARIABILITY in our common species of Dictyophora. A. H. Christman. Jour. Mycol. 10:101-108. May 1904.
- WASHINGTON Erysiphaceae, *see Notes on the Erysiphaceae* . . .
- VITIS sp., stem, host to Dermatea puberula Durand n. sp. Jour. Mycol. 10:101. May 1904.
- WYNNEA americana Thaxter n. sp., growing on the ground in rich woods. Bot. Gaz. 39:246. April 1905.
- WYNNEA, A New American species of. Roland Thaxter. Bot. Gaz. 39:241-7. Pl. IV-V. April 1905.
- XENOPARASITISM [a term to describe those cases where a form of a fungus which is specialized to certain host-species and confined to them under normal circumstances proves able to infect injured parts of a strange host. Ernest S. Salmon]. Ann. Mycolog. 3:11. Feb. 1905.
- XYLARIA (Xylodactyla) longiana Rehm n. sp., ad lignum Quercus. Ann. Mycolog. 2:175. Mar. 1904.

## NOTES FROM MYCOLOGICAL LITERATURE, XIX.

W. A. KELLERMAN.

FUNGI ESCULENTES PHILIPPINENSES, EDWIN BINGHAM COPELAND, Annales Mycologici, Feb. 1905 [3:25-9] contains Latin descriptions of a species of Lycoperdon, nine species of Coprinus, two species of Panaeolus, five species of Agaricus (Psalliota), and four species of Lepiota, all proposed as new by the author.

M. C. COOKE PUBLISHES AN EXTENDED ACCOUNT OF THE FUNGOID PESTS of Forest trees in the Journal of the Royal Horticultural Society, vol. XXIX, 1905, Part IV, pp. 361-391, Pl.

XIX-XXI. Popular descriptions are given, also notes and distribution. The three colored plates illustrate habit and spore characters of 54 species.

ON A FUNGUS DISEASE OF EUONYMUS JAPONICUS L.f., by Ernest S. Salmon. In this we find an interesting account, with two full-page illustrations of *Oidium euonymi-japonici* (Arc.) Sacc. which occurs in Italy, Austria, Hungary, France and England. Experiments by Mr. Salmon showed that the following sorts were susceptible: *E. japonicus aureus*, *albo-marginatus*, *ovatus-aureus*, *microphyllus*, Silver-Gem. The immune kinds were *E. japonicus carrierei*, *E. nanus*, *E. europaeus*, *E. chinensis* and *E. americanus*. See *Journal of the Royal Horticultural Society*, vol. XXIX, part 4, Dec. 1905, pp. 434-442.

THE TABLE OF CONTENTS OF THE JOURNAL OF MYCOLOGY for July 1905 (vol. 11) is as follows: Morgan, A New Species of *Kalmusia*, and *Peziza Pubida* B. & C.; Davis, A New Species of *Synchytrium*; Holway, North American *Salvia*-Rusts; Clevenger, Notes on Some North American *Phyllachoras*; Lawrence, Blackspot Canker and Blackspot Apple Rot; Sumstine, *Gomphidius Rhodoxanthus* Once More; Sherman, Host Plants of *Panaeolus epimyces*; Bessey, Yearbook of Information Concerning Diseases and Injuries of Cultivated and Wild Economic Plants; Kellerman, Notes from Mycological Literature XVI, and Index to North American Mycology; Editor's Notes.

THE IER FASCICULE, TOME XXI, BULLETIN de la Société Mycologique de France, published 18 Feb. 1905, contains the following original articles: L. Rolland, *Les champignons des îles Beleares* (suite); F. Guéguen, *Effet singulier de la croissance d'un champignon de couche*; F. Guéguen, *Sur l'emploi des bleus pour coton et pour laine dans la technique mycologique*; L. Lutz, *Sur les principaux modes de formation des hyméniums surnuméraires dans les champignons*; Bourguelot et Herissey, *Sur la trehalase, sa présence générale dans les champignons*; Dr. Gillot, *Empoisonnement par les champignons*.

UREDINEAE JAPONICAE VI., VON P. DIETEL, in *Eng. Bot. Jahrb.* 37:97-109, 19 Sept. 1905, contains species (among which many are new), of *Uromyces*, *Puccinia*, *Phragmidium*, *Ravenelia*, *Melampsora*, *Melampsoridium*, *Pucciniastrum*, *Klastopsora*, *Cronartium*, *Hyalopsora*, *Ochrosora*, *Coleosporium*, *Chrysomyxa*, *Aecidium*, *Peridermium*, and *Uredo*. "Von besonderem Interesse sind ferner, wie wir schon früher hervorgehoben haben, solche Arten, die sich auch in anderen Erdteilen, namentlich in Nordamerika, teilweise in etwas anderen Formen wiederfinden. Hierzu wolle man unter die Bemerkungen über *Uromyces brevipes* und *U. ovalis* vergleichen." Extended notes on many species occur, e. g. on *Puccinia lactucae* Diet.; *P. Lactucae denticulatae* Diet.

n. sp. is given, host *Lactuca denticulata*, with spores smaller than the foregoing.

FUNGI AFRICAE ORIENTALIS IV, von P. HENNINGS, Eng. Bot. Jahrb. 37:102-118, 3 Okt. 1905, is an enumeration of collections made in 1903, with notes and localities. A large number of new species is described. A new genus, *Phragmidiella*, is proposed, placed between *Phragmidium* and *Kühneola*.

P. HENNINGS, FUNGI CAMERUNENSIS IV, Eng. Bot. Jahrb. 38:119-129, Okt. 1905, continues the annotated list begun in previous Nos. of the same Journal, describing a large number of new species.

OTTO JAAP, FUNGI SELECTI EXSICCATI. Serie VI. Ausgegeben im November 1905, consists of the following:

126. *Urophlyctis Kriegeriana*. Schweiz. 127. *Taphridium umbelliferarum* f. *heraclei*. Schweiz. 128. *Coudonia Osterwaldii*. n. sp. Mark. 129. *Lachnum controversum* f. *caricicola*. n. f. Mark. 130. *Peizizella Jaapii*. n. sp. Mark. 131. *Belonium junci*. n. sp. Mark. 132. *Propolis rhodoleuca*. n. matr. Dänemark. 133. *Cucurbitaria pityophila*. Mark. 134. *Pleospora media*. n. matr. Schleswig. 135. *Melampsora reticulatae*. Schweiz. 136. *Uromyces alchimillae alpinae*. Schweiz. 137. *Uromyces sparsus*. Holstein. 138. *Puccinia molinia*. Mark. 139. *Puccinia cruciferarum*. Savoyen. 140. *Pucciana gigantea*. Schweiz. 141. *Corticium typhae* var. *caricicola*. Mary. 142. *Hydnum fuligineo-album*. Mark! 143. *Hypholoma storea* f. *caespitosa*. Mark! 144. *Mutinus caninus*. Holstein. 145. *Mycogone Jaapii*. n. sp. Mark. 146. *Ramularia spiraeae arunci*. Schwarzwald. 147. *Ramularia evanida*. Schweiz. 148. *Ramularia prenanthis*. n. sp. Schwarzwald. 149. *Passalora bacilligera* f. *alnobetulae*. n. f. Schweiz. 150. *Fusicladium Schnablium*. n. matr. Schweiz.

AGRICULTURAL BACTERIOLOGY by H. W. CONN, published by P. Blakiston's Son & Co., pp. 1-412, 1901, is a study of the relation of bacteria to agriculture with special reference to bacteria in the soil, in water in the dairy, in miscellaneous farm products and in plants and domestic animals. The author does not attempt to confine himself strictly to bacteriology — as for instance he says "it has been a growing conviction that a considerable number of phenomena, hitherto attributed to Bacteria, are directly due to a class of chemical ferments called *enzymes*." These are not therefore excluded from consideration in this book. In Part V parasitic bacteria are considered and the species causing some of the common diseases are considered. It is an admirable book for students and for general readers.

THE POLYPORACEAE OF NORTH AMERICA, XIII. The described species of *Bjerkandera*, *Trametes*, and *Coriolus*. William Alphonso Murrill. Bull. Torr. Bot. Club, 32:633-656. Dec. 1905. The treatment of our species is similar in plan to that followed in the author's previous articles. New names are *Bjerkandera fragrans* (for *Polyporus fragrans* Peck), *Trametes unicolor* (for *P. unicolor* Fr., and *P. obtusus* Berk.), *Coriolus hirsutulus* (for

*Polyporus hirsutulus* Schw.), *C. pubescens* (for *P. pubescens* Fr.), *C. subluteus* (for *P. subluteus* Ell. & Ev.), *C. sartwellii* (for *P. sartwellii* B. & C.), *C. ilicincola* (for *P. ilicincola* B. & C.), *C. flabellum* (for *P. flabellum* Mont.), *C. planellus* (for *P. planellus* Peck), *C. sobrius* (for *P. sobrius* B. & C.), *C. nigromarginatus* (for *P. hirsutus* Fr., *Boletus nigromarginatus*, Schw.), *C. sullivantii* (for *P. sullivantii* Mont.), *C. sericeo-hirsutus* (for *P. sericeo-hirsutus* Kl., *Hexagona sericea* Fr.), *C. arenicolor* (for *P. arenicolor* B. & C.), *C. hirtellus* (for *Polystictus hirtellus* Fr.), *C. tener* (for *Polyporus tener* Lév.).

FUNGI UTAHENSIS, FASCICLE ONE, collected and distributed by A. O. Garrett, [received in December 1904] consists of exsiccata with reprints of the original description for each species accompanied by the following announcement: "It is the intention to issue *Fungi Utahensis* in uniform sets of twenty-five specimens to the set, the fascicles to be distributed to subscribers as rapidly as material is acquired. An attempt will be made to have each fascicle contain specimens belonging to closely related groups. As will be seen from the accompanying list, all the numbers in this fascicle are representatives of the Uredineae. The plan pursued in the "make-up" of the sets will be similar to that of Professor Kellerman's *Ohio Fungi*."

THE FIRST PART OF THE FIRST VOLUME OF THE BIOGRAPHICAL INDEX of North American Fungi, by William G. Farlow, has been issued by the Carnegie Institution at Washington (1905), consisting of a preface (pp. I-IX), abbreviations of authors and publications cited (XI-XXIV), and the Index from *Abrothallus* to *Badhamia* (pp. 1-312). The author says it should be borne in mind that the Index does not purport to be a summary of all references to North American fungi, but it is limited to those which concern the systematic Mycologist, and does not include references to papers on fungicides and other technical and agricultural subjects as such, but cites them only when they also contain notes of interest to the systematists. The importance of the work is at once recognized and doubtless the remaining parts and volumes will soon appear. A sample will show the plan Dr. Farlow has adopted in carrying out his Index:

*Accidium Apocyni*, S.

S. Syn. Car. 68 (42) no. 448. *d.* 1822.

Bon. Abh. Nat. Ges. Halle 5:208 (42). 1860.

M. A. Curtis, Bot. N. Car. 124. 1867.

Burrill, Bull. Ill. Lab. 2:236. 1885 and Rept. Ill. Ind. Univ. 12:147. 1885.

Kellerm. & Carl. Tr. Kans. Acad. 10:91. 1887.

De Toni in Sacc. Syll. 8:808. *d.* 28 Oct. 1888.

Webber, Bull. Nebr. Exp. Sta. 1:329 (59). 18 Dec. 1889.

Gall. Bull. U. S. Agr. Veg. Pathol. 8:55. 1889.

Webber, Rept. Nebr. Agr. 1889:209 (69). 1890.

Williams, Bull. S. Dak. Exp. Sta. 29:49. Dec. 1891.

Cheney, Tr. Wis. Acad. 10:69 Oct. 1895.  
Tubefu-Smith, Diseases of Plants, 411. 1897.  
Ell. & Ev. Fung. Columb. 1295. May 1898.  
Barthol. Tr. Kans. Acad. 16:186. June 1899.  
Patterson, Bull U. S. Agr. Pl. Industry 8:8. 3 Feb. 1902.

TWO FUNGI GROWING IN HOLES made by wood-boring insects, by Perley Spaulding, occupies pp. 73-77, plates 25-27, 15th Annual Report of the Missouri Botanical Garden. The species referred to are *Flammula sapineus* and *Claudopus nidulans*.

JOHN L. SHELDON MAKES A REPORT ON PLANT DISEASES of West Virginia [Bulletin 96, Agr. Exp. Sta. June 30, 1905]; giving in popular language short account of several diseases, with a half dozen half-tone plates.

FROM THE OFFICE OF EXPERIMENT STATIONS, the U. S. Department of Agriculture issues as Farmers' Institute Lecture No 2, A Syllabus of Illustrated Lecture on Potato Diseases and their treatment, authors F. C. Steward and H. J. Eustace. The lecture is to be accompanied with 47 lantern views—marginal numbers on the page corresponding to the slides, the legends given in the Appendix.

IN AN ARTICLE IN SCIENCE, N. S., Vol. XX, No. 497, pp. 55-6, July 8, 1904, entitled Vitality of *Pseudomonas campestris* (Pam.) Smith on cabbage seed the writers say that they have found that *P. campestris* may live on dry cabbage seed for at least ten months.

C. A. J. A. OUDEMANS CONTINUES HIS CONTRIBUTIONS à la Flore Mycoligique der Pays-bas (XX)-Overdr. Ned. Kr. Arch. 3e Ser. II, 4. Supplement, pp. 1077-1132, and pl. XI-XIII. Interesting new species are the following: *Entyloma lini* on *Linum usitatissimum*; *Phyllosticta acoricola* n. n. for *Phoma acori* Cooke; *Rhabdospora phlogis* on *Phlox drummondii*; *Stilbospora robiniae* on *Rabinia pseudacacia*; *Stigmella atriplicis* on *Atriplex hortense*.

CONSIDERING THE WIDE DISTRIBUTION OF THE BANANA PLANT in tropical countries throughout the world, it is quite remarkable that it has so very few serious enemies in the form of insects and fungi says J. E. Higgins in Bulletin No. 7, Hawaii Agr. Exp. Station, Honolulu, 1904. Three fungi are given which prey upon this plant, 1st, Banana Anthracnose (*Gloeosporium musarum* Cke. & Masee); 2nd, *Marasmius semiustus* B. & C.; 3rd, *Fusarium* sp.

PRELIMINARY DIAGNOSIS OF NEW SPECIES OF LABOULBENIACEAE,—VI, by Roland Thaxter, forms No. 11, Vol. XLI, Proceedings of the American Academy of Sciences, July 1905. "With the present contribution, which comprises such new forms of Laboulbeniaceae as have accumulated during the past two



years, the writer proposes to close the series of preliminary diagnoses which he has issued from time to time since 1899." Dr. Thaxter has described about 500 species in all including about 48 genera. In this last paper about thirty new species are described. Nine of them are North American.

ANNALES MYCOLOGICI FOR FEB. 1906 (Vol. IV, No. 1) has the following table of contents: Blakeslee, Albert Francis, Zygospor Germinations in the Mucorineae; Sydow, H. et P., Neue und kritische Uredineen — IV; Freeman, E. M., The Affinities of the Fungus of *Lolium Temulentum*, L.; Oertel, G., Eine neue *Rhabdospora*-Art; Elenkin, A. A., Species novae lichenum in Sibiria arctica a cl. A. A. Birula-Bialynizki collectae (expeditio baronis Tol); Krieger, W., Einige neue Pilze aus Sachsen; Heinze, Barthold, Sind Pilze im Stande, den elementaren Stickstoff der Luft zu verarbeiten und den Boden an Gesamtstickstoff anzureichern?; Rehm, Ascomycetes exs. Fasc. 36; Saccardo, P. A., *Mycetes aliquot congoenses novi*; Neue Literatur; Referate und kritische Besprechungen.

H. ET P. SYDOW NEUE UND KRITSCHKE UREDINEEN — IV. in *Annales Mycologici* for Feb. 1906 (4:28-32) publish a dozen new species mostly from North America and the Philippines. The American species are *Uromyces amoenus*, *U. amphidymus*, *U. fremonti*, *U. heterodermus*, *U. substriatus*, *Puccinia fuchsiae* and *P. aemulans*.

A REPORT OF THE INVESTIGATION done under grants as research assistant of the Carnegie Institution, by Albert Francis Blakeslee, is published in the *Annales Mycologici*, 4:1-28, Feb. 1906. It consists of an exhaustive study of Zygospor Germinations in the Mucorineae. A lithographic plate accompanies the paper, illustrating *Phycomyces nitens*.

E. M. FREEMAN READ A PAPER BEFORE THE MYCOLOGICAL SOCIETY at New Orleans on the Affinities of the Fungus of *Lolium temulentum* L., which is published in *Annales Mycologici*, 4:32-4, Feb. 1906. In this he refers to the discovery in 1895-6 by Frank Maddox of Tasmania that in loose smut of wheat an infection of the grains could be produced by placing spores on the ovary at flowering time. The grains so infected were apparently normal, but from them smutted plants were produced in the following year. Brefeld, and also Hecke, in 1903-4, rediscovered the same method of infection in case of loose smut of wheat and of barley smut. The author has previously pointed out the strong probability that the fungus of *Lolium temulentum* was a smut. Now he suggests that the recent discoveries of the infection method as stated above strengthen considerably the theory of its smut origin.

LICHENS—STEREOCAULON, PILOPHORUS AND THAMNOLIA, by Carolyn W. Harris, *The Bryologist*, 7:71-3, Sept. 1904, is a popular article with four illustrations in the text. Seven or eight species receive notice.

BULLETIN 137, ONTARIO AGRICULTURAL COLLEGE, is devoted to a Bacterial Disease of Cauliflower and Allied Plants, author F. C. Harrison. A brief introduction is followed by a consideration of the subject under the heads of Pathenogenesis, Pathological History, and Inoculation experiments.

A SHORT ARTICLE, with ten beautiful half-tone plates, on Abberant veil Remnants in some edible Agarics, by William Trelease, was published in the 15th Annual Report of the Missouri Botanical Garden. The species represented are *Lepiota naucinus*, *Agaricus amygdalinus* and *Hypholoma appendiculatum*.

UNDER THE HEAD OF TOBACCO DISEASES AND TOBACCO BREEDING, the Ohio Agricultural Experiment Station issued Bulletin 156, November 1904, by A. D. Selby. In the section giving account of diseases due to parasitic fungi and Bacteria we find the following listed: Root rot (Black Rot) [*Thielavia basicola* Zopf]; Bed Rot [*Rhizoctonia*]; Decay of Tobacco Seedlings [*Alternaria-A. tenuis*?]; the Granville Tobacco Wilt; Leaf Blight (Frog-eye) [*Cercospora nicotiana* E. & E.]; White speck and Brown spot [*Macrosporium tabacinum* E. & E., and *M. longipes* E. & E.]; Downy and Powdery Mildew.

AN INTERESTING LECTURE, largely historical, on the Study of Parasitic fungi in the United States, by G. P. Clinton, before the Massachusetts Horticultural Society, is printed in the Transactions, 1904, Part I, pp. 91-106.

O. APPEL UND R. LAUBERT: DIE KONIDIENFORM DES KARTOFFELPILZES *Phellomyces sclerotiphorus* Frank. *Berichte der Deutschen Botanischen Gesellschaft*, 1905 [23:218-220]. The authors succeeded in inducing the stromata of this fungus of which hitherto "neither in nature nor by culture, has any typical fungal fructification been observed," to develop and they obtained a form identical with *Spondycladium atrovirens* Harz. "Aus den in gekürzter Form hier vorläufig mitgeteilten Untersuchungen geht hervor, dass der Pilz, der von Frank als *Phellomyces sclerotiphorus* beschrieben und als Krankheitserreger in die phytopathologische Literatur eingeführt worden ist, nur ein noch steriler Entwicklungszustand des *Spondycladium atrovirens* Harz ist und dass infolgedessen der "interimistische Name *Phellomyces sclerotiphorus* Frank" zu streichen und durch "*Spondycladium atrovirens* Harz" zu ersetzen ist."

THE AGRICULTURAL EXPERIMENT STATION issued a Bulletin, No. 64, (1904) on the Apple Scab in Western Washington by W.



H. Lawrence, of which this is his summary: Apple scab is abundant and destructive in Western Washington. The apple scab fungus has two stages — a summer, or parasitic stage [*Fusicladium dendriticum*], and a winter, or saprophytic stage [*Venturia aequalis*]. The summer stage infests the leaves, flowers and fruit; the winter stage lives in the dead leaves of the apple which fall off in autumn. The winter stage produces the spores that cause the infection of the flowers, leaves and fruit in spring. To destroy the fungus, destroy the fallen leaves in the fall or winter. To prevent the fungus attacking the apple in spring, spray with a properly prepared Bordeaux mixture.

ON A FUNGUS DISEASE OF EUONYMUS JAPONICUS LINN. F. by Ernest S. Salmon is reprinted from the Journal of the Royal Horticultural Society, Vol. XXIX, Part 4. The parasite in question is *Oidium euonymi-japonicae* (Arc.) Sacc. A half-tone illustration of affected leaves is given, also outline figures of conidia, appressoria and haustoria. It is stated that a peculiarity of this Mildew is the capacity it possesses of persisting by means of hibernation of its mycelium. As to its introduction the author says: It seems, then, more probable that the fungus may have been lately brought to Europe on diseased plants imported from Japan than that a European species of *Oidium* has of late years spread from its original host and attacked *E. japonicus* as a new host-plant. On the former theory we find an explanation of the fact mentioned above, viz. the epidemic character of the disease now beginning to be shown by the *Oidium* in Europe, since it is an established fact that a parasitic fungus on reaching a new country attacks its host-plant with exceptional virulence for several years after its arrival.

NEW OR RARE PYRENOMYCETAE FROM WESTERN NEW YORK, by Charles E. Fairman, Proc. Rochester Acad. Sci. 4:215-224, March 1906, containing Nos. 355-380, is supplementary to his list of Pyrenomycetae of Orleans County, N. Y., printed in the same volume. Nos. 355-364 are new species by Fairman; Nos. 365-6 are new species by Rehm; notes and supplementary descriptions are given for Nos. 367-380. One full page illustration is devoted to *Sporormia leguminosa* Fairman n. sp. and one to *Amphisphaeria aeruginosa* Fairman n. sp., Sporidia and other parts of several of the new species occupy another plate.

CHARLES HORTON PECK, NEW SPECIES OF FUNGI, Bull. Torr. Bot. Club, 33:213-221, Apr. 1906, describes 22 species of the higher Fungi, mostly belonging to the following genera; *Lepiota*, *Hygrophorus*, *Collybia*, *Russula*, *Lentinus*, *Annularia*, *Inocybe*, *Flammula*, *Psathyrella*, *Hydnum*, *Craterellus*, *Monilia*, *Marsonia*, *Haplosporella*, *Sarcoscypha*, *Poronia*, *Leptosphaeria*, and *Pleospora*.

## JOURNAL OF MYCOLOGY

*A Periodical Devoted to North American Mycology. Issued Bi-monthly; January, March, May, July, September and November. Price, \$2.00 per Year. To Foreign Subscribers, \$2.25. Edited and Published by* W. A. KELLERMAN, PH. D., COLUMBUS, OHIO.

---

### EDITOR'S NOTES.

There seems to be a difference of opinion, at least a difference in practice, in regard to the proper mode of giving the *date* in a citation from a periodical publication — and therefore the editor is provoked to make a comment.

First, let the question be raised, as to where in the periodical the *actual date of issue* should be printed. Only one answer can, it seems to us, be given, namely, *at the bottom of the last page*. Most of the periodicals follow this plan; a few however give this date in the subsequent No., Part or Heft, a plan that is very objectionable. It precludes citing anything in the No. until the next No. appears; it adds to the labor of making a citation or of getting the exact date since it always requires consulting two Nos. instead of one.

If a periodical repeats on the first page of each of the issues its name, *date*, etc., that date (even if only the *month* and year) should appear in making the citation instead of the actual date of the issue which might be found on the last page or on the cover. Thus if Saccardo's article in the Feb. (1906) No. of *Annales* be cited, the date ought to be as here given, and not "5 April 1906", which was the actual date of issue. Citation is primarily for place to direct the reader. If one were referred to "5 April 1906" for the article he would hardly search for a *Feb. No.* — but rather for an "April No." (It might be desirable to give in parenthesis after the date-designation of the No., also the actual date of issue.) If, however, the citation, for example pertain to the article in *Hedwigia*, Band XLV., Heft 3, by Magnus, it would necessarily be as to date, "28 Mar. 1906." (No date other than that of the actual date of issue is printed.) This is given only on the cover — of course given at the end of the year or close of the volume in connection with the title-page, etc.